
JOHANNESBURG – Security, Stability and Resiliency 2 RT Meeting - Day 1

Sunday, June 25, 2017 - 00:00 to 00:00 JNB

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DENISE MICHEL: We'll get started. We're expecting Alain, Boban, and Ram around 10:00 a.m., and then Eric will be joining the team for tomorrow morning. Who do we have? Do we have any members remotely at this point? Can you use the microphone please?

YVETTE GUIGNEAUX: Geoff Huston and Mr. Matogoro are online.

DENISE MICHEL: Great. Welcome, everyone. Why don't we go around the table and have people introduce themselves, their professional affiliation, and for team members the groups that put you here, so to speak, if there is one. Larisa, would you like to start us off?

LARISA GURNICK: Sure. Good morning, everybody. Larisa Gurnick, ICANN staff.

NEGAR FARZINNIA: Hello, everybody. Negar Farzinnia, ICANN staff.

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ŽARKO KECIĆ: Yeah, good morning. Žarko Kecić, .rs. I have affiliated myself with second and third, which is ICANN Security Group and DNS Security.

DON BLUMENTHAL: Thanks. Don Blumenthal, semi-retired. I don't know if I have an affiliation or not, but I'm here as one of the SSAC representatives.

CATHY HANDLEY: Cathy Handley, ARIN, RSSAC.

JAMES GANNON: James Gannon. I'm here as an individual and GNSO.

KAVEH RANJBAR: Kaveh Ranjbar, RIPE NCC from ICANN Board.

STEVE CONTE: Steve Conte, ICANN staff.

DENISE MICHEL: Denise Michel, Facebook and the GNSO [did this to me].

YVETTE GUIGNEAUX: Yvette Guigneaux, ICANN staff.

JENNIFER BRYCE: Jennifer Bryce, ICANN staff.

KAREN MULBERRY: Karen Mulberry, ICANN staff.

DENISE MICHEL: Geoff and Matogoro, if you're on the line, would you like to introduce yourselves?

YVETTE GUIGNEAUX: I can do it for them. Unfortunately, we don't have a phone bridge where they can directly speak in. But Geoff has been typing that he is Geoff Huston and he's on Adobe Connect. I'm repeating what he actually typed. And Mr. Matogoro is also in Adobe Connect joining us remotely as well.

DENISE MICHEL: Thank you very much. Please, for our remote colleagues, don't hesitate to I guess type if you're having trouble hearing us or, of course, if you have contributions to the discussion.

We are streaming this. It's on Adobe Connect. As with all of our meetings, we also welcome observers. Staff will assist us in keeping track of any observer contributions to our discussions

throughout today. We'll take time later in our agenda to make sure we review these as well. Are there any observers at this point in Adobe Connect? No?

Do we have any updates to the – I would like to remind people, especially since we have remote participants, to introduce yourselves before you start speaking and use the microphones to make this accessible to all. Does anyone have any updates to their Statements of Interest? James?

JAMES GANNON:

Thanks. I just need to do my usual legal disclaimer. I'm here as an individual. Anything I say here is not a representation of the company I work for. They do not support me to come to ICANN. I am not paid by my company to be here, and I take vacation time to be here so I'm not even getting benefit in kind to attend. Thank you.

DENISE MICHEL:

Thank you, James. Don?

DON BLUMENTHAL:

I'm kind of reaffiliating myself with University of Michigan. I had been teaching there, got laid off, but I think I'm going back.

DENISE MICHEL: Thank you, Don. Are there any additional updates to Statements of Interest? Okay.

Let's move on to the agenda review then. Ah, Ram. Welcome, Ram. No? Put my glasses on. When you have a chance, could you put the agenda up? We've updated the agenda for the team's meetings today and tomorrow. Let's review that. I want to make sure we get any additional input that people have.

The key changes in case team members haven't had a chance to review it are that we had a couple of tentative briefings on the initial schedule. It turns out that the abuse report won't actually have their final analysis completed until next month, and the consultants that are creating that report will be available through July and at least part of August. So we'll have an opportunity to get a briefing on one of our Tuesday conference calls from that group.

And then the registry security draft report – proposed processes rather – recently has been posted for public comment. We'll also have an opportunity in the coming months to get a more fulsome briefing on that as well, so that has been deferred.

Staff has been able to confirm staff briefings on several of the SSR1 recommendations, which is certainly welcome. So you'll see at the 10:00 hour, we have a passel of staff that will be joining us

to address a number of recommendations. Do you have that added? Could you scroll up a little bit? I was just noting the 10:00.

At the 10:00, we have as I said a number of staff people who will be coming in. They're only available from 10:00 to 12:00, so they've been added during that timeslot on the schedule. They'll be addressing recommendations. I don't know why I should go through the numbers. No one has these memorized. But they'll be addressing issues relating primarily to the budget and operating plan and the GDD-related elements and some additional input from the OCTO Team and the recommendation relating to certification will also be addressed this morning.

We have a standing request to staff to provide the names, department, and availability over the next month so we can complete the initial presentations on these recommendations. We have a Google Doc on this. Has that been updated?

NEGAR FARZINNIA:

Yes. The Google Doc has been updated with the recommendations we are providing briefings on today. We have tentative timelines filled out for the remaining recommendations to be confirmed and to be scheduled yet. And I'll be adding names of presenters as I confirm their availability more and more into the document. So that's a rolling document and will be updated on an ongoing basis.

DENISE MICHEL: For the sake of clarity, what we need from you is for the remaining SSR1 recommendations for which we have not received a presentation or staff discussion, we need the department, the name of the staff, and we need the Tuesdays over the next month essentially that they may be available. Then that will allow the team to make decisions on how we use our Tuesday conference calls and when we'll be able to fit the remaining recommendations in. Does that make sense?

NEGAR FARZINNIA: Absolutely. The plan is that after this Johannesburg briefing, the remaining briefings will take place during the Tuesday conference calls that the review team is holding, dates to be confirmed based on availability of the material and related staff. And we will not hold anything outside of your regular meeting times.

DENISE MICHEL: Before we schedule them, you need to give the chairs basically the availability of the remaining staff on the Tuesday calls because as you would expect coming out of this face-to-face meeting, we'll then need to finalize the working plan and create our agendas or objectives for the next series of calls.

NEGAR FARZINNIA: Absolutely. We'll fill out the Google Doc ahead of time, and then you can discuss if that works with the Review Team's availability and schedule as well.

DENISE MICHEL: Okay. So that's the key change to the draft agenda then.

Moving back up to the top, we have the overarching objective for our face-to-face meetings today and tomorrow is to develop a more detailed work plan and timeline for the team, to provide prioritization and clarity to the subtopic list and a more specific path to discussion and production and team decision making in those various areas.

Cathy and James?

CATHY HANDLEY: Thank you. You said that the only major change was the SSR1 information. I don't see anything on here at all about responding to the Board's document on the TORs, and I would say that's probably the most pressing thing that we need to do before we get into any of the other work. Thank you.

DENISE MICHEL: Yeah, thanks, Cathy. I was just noting the change from version one. That is the change that's made from version one. And then I was raising new business, for which we've just received a note from the Board. So we can discuss that as well. James?

JAMES GANNON: Thanks. If I can make a suggestion on that topic. At 1:15 after lunch, we have some time set out for looking at the subgroup work and mapping things to the terms of reference. It might be an idea to instead of focusing on mapping to the terms of reference that in that slot we look at the Board's response and formulate a response to that in the same vein of looking at the work plan and the terms of reference. Rather than looking at it as a finalized item, we look at what we need to do to it to respond to the Board.

DENISE MICHEL: Thanks. We have a couple members, including Eric, who can't be here today but will be here tomorrow and also wanted to participate in that. We also want to make sure that Kaveh, our member from the Board, who is wearing many hats here in Johannesburg is also available to participate in that discussion. So I'd be happy to have a preliminary discussion, but I'd also like to put this on the agenda for tomorrow to enable more committee members and for another co-Chair also to participate.

In addition, the co-Chairs have asked for some additional information from the security staff that we can factor into the discussion. So again, I'd propose that we tee up the discussion today, if you'd like, to make sure everyone has had a chance to look at the Board letter and understands the basic components. And then I'd like to officially put this on the agenda for tomorrow so Eric and others can participate and we can make sure that we have Kaveh's time.

While in this vein, are there any additional items that should be put on the tomorrow's agenda? We're going to carve out time so James can discuss Trello, a new work tool that the team will be using. So that will be something we'll update. But I want to make sure that there aren't any other suggestions from team members of items they would like to address on today's or tomorrow's agenda. Is there anything from our remote participants?

YVETTE GUIGNEAUX: Mr. Matogoro had noted a comment. He said, "Think also for remote participants for Board input." So I guess that would go across the board for any kind of Board input. He's requesting that remote participants be considered in that.

DENISE MICHEL: Right. Thank you. Absolutely. Anything else? Okay.

On today's agenda, we have work on the subtopics and our scoping discussion. Refining and clarifying the topics that we have listed in the various subtopic groups, discussing the scope and of course applicability to our terms of reference of the five areas that we've outlined and that contain the initial brainstorming contributions of team members.

We'll have an overview of that and some initial discussions before the ICANN staff gets here in about half an hour. Then we'll focus on the SSR1 implementation briefings, have discussion as needed, follow up discussion on those recommendation topics. Then we break for lunch at 12:30. After that, we'll continue our work on the subtopics. Again, the goal here is to refine and prioritize the subtopic list and identify information gathering needs, research needs, and start building a more detailed work plan of how we want to move forward in working through these issues.

We have a slot on the agenda today to discuss outreach. There has been a request and questions from team members about how we'll be handling outreach. That's on our afternoon agenda. Then before we break, we'll want to review our action items and make sure tomorrow's agenda reflects everything that we need it to. We have a target adjournment time of 5:00, and staff has scheduled a team dinner for this evening as well. So that's up on today's list.

Can staff please bring up the subtopics list? As we review the subtopics and dive into our discussions on these, also keep in mind that we have an outstanding request to make sure that every member has identified the subtopic group or groups that they want to participate in, in this initial work and that each subtopic has a rapporteur. It will be important if we have breakout discussions on these subtopic groups that we have a lightweight process in place so that one member of the group can be the rapporteur and holder of the pen, if you will, to report back to the full team the results of the group discussions.

The idea here is to allow smaller group discussions on subtopics to initially work through the prioritization and recommendations on how to work through the topics and develop a more detailed work plan of how and when they'll be advancing their discussions and bringing more detailed suggestions in the subtopic areas back to the full team.

Can anyone remind me if we have any rapporteurs identified yet for any of the teams? James is a rapporteur for the IANA Transition Group. Staff, do we have any of the rapporteur volunteers?

YVETTE GUIGNEAUX: No. Just James.

DENISE MICHEL: That’s one of the things we’ll need before we leave Johannesburg this weekend. We may be pulling names out of a hat [inaudible], so let me just warn you in advance.

Something else to emphasize here is that in the tradition of ICANN Review Teams, these are teams which were created by the community to provide assessment and recommendations in the key areas that ICANN operates under and, unlike the Board and perhaps some other groups in ICANN, the team members themselves are asked and expected to provide the substantive work that the team does. We have the ability to rely on staff and researchers to provide us expertise and input on select areas, but the bulk of the work is to be done by team members.

So with that in mind, let’s do an initial review of the subtopic groups that we’ve laid out and as we do, invite comments from team members, any input you have on the best way to tackle each subgroup set of topics, identify any issues, clarifications required, prioritizations that are needed. James?

JAMES GANNON: Thanks. One thing particularly for the two big groups, the ICANN Security and the DNS Security piece, I think that what we need to happen I suppose quickly is I think Eric called it the “de-

duplication” and the merging of the huge lists that we initially came up with into what our actual tasks are. There’s a lot of similar worded but all looking at the same issue items that we came up with in Madrid. I think it’s probably quite a daunting list to look at when you’re a small group and you might 50, 60, 70 issues that we’re supposed to be looking at. But if you actually look down into the detail of it, there’s probably 15, 20, 25 actual core issues within those bigger lists.

So I think at some stage very quickly we need to have the de-duplication exercise and those merging of very similar items that we came up with because at that point, then we will have what the subgroups are actually supposed to be doing as opposed to the areas that they’re supposed to be looking at. I think we’ve sufficiently scoped that out now. There still may be some discussions over whether the de-duplicated item is in scope or out of scope or whatever, but that’s a parallel conversation we can have. But for the ones that are clearly in our scope and the ones that we clearly can start work on now, I think the quicker that we can do that and get started on that, I would almost like to push us to try and get that done by the end of Johannesburg so that we can start doing items rather than talking about them.

DENISE MICHEL: Absolutely. Again, that's really our goal here is to be able to actually start the work and to have a more detailed framework of how we're proceeding with the subtopics and the work overall. Again, I invite staff to just jump in. I don't yet have access to the Adobe Connect room, so if there are comments that are being posted by our two colleagues, please just raise them. Feel free to jump in any time. James?

JAMES GANNON: Just a brief response. Just for the record, I think that de-duplication exercise should take place in the subgroups rather than at the plenary level because when we do it in a bigger group it's going to take more time, you're going to have people who are going to be not interested in some areas, they're going to be over-interested in other areas. I think the people who are interested in the subgroups, who have signed up for them are the ones who should do that de-duplication exercise.

DENISE MICHEL: Right. So refinement, clarification needs to occur at the subtopic level, but we also need to be mindful of duplication across a couple of the subgroups there are. So we'll need to take care of that too. Don?

DON BLUMENTHAL: I was going to suggest that, but also we have people who are signed up for more than one group. I think we should do at least some plenary work. I guess it's along the lines of the cross-fertilization or whatever to let us who might be signed up for more than one group at least hear what's going on with the others, decide which small group it would be more appropriate to sit with here.

DENISE MICHEL: Thank you, Don. I think the most straightforward of the subtopics is SSR1 Implementation. I don't think we have issues of duplication there, per se. It's fairly clear what that team needs to address. I think it would be useful for a few folks. It's not a very big team. I think there are – yeah. We'll need to flag for the other subtopics where there are connections. Some of the issue areas that are addressed in SSR1, of course, are relevant for some of the other workgroups. Once we have the staff briefings completed for all of the recommendations, this sub team should be easily able to create a more specific work plan and come back to the full team with it. On this team, by default the co-Chairs are covering pretty much all of the teams, but we have Alain and Ram on this subtopic team. If anyone else would like to jump in, of course more hands are always welcome.

Žarko, did you have any comments on the SSR1? You looked at it in the past.

ŽARKO KECIĆ:

Yeah, I looked at almost all papers which are connected to SSR 1 and there is a lot of work to do. What I would like to add is that some parts of SSR1 review will fill down to other subgroups. So I think it is best to do the de-duplication with other groups because probably they will do more comprehensive work than SSR1 Review Team. I think we are ready to start with this. I have some additional work done. Actually, I didn't finish that. I'll finish after the meeting in Johannesburg, and I will add that to SSR1 Review Team just for [help].

DENISE MICHEL:

That's very useful. Thank you so much for that. I think there are two issues here. I think the first issue is much more basic. Did the ICANN organization implement the recommendation and was it effective? I think there are baseline questions that are really specific to SSR1 that need to be answered as part of this subtopic. And then distinct from that is the broader issue of follow up work, if you will, or stepping off issues from the issues that are raised in SSR1. Those, I think, would naturally be addressed by and large in the other subtopic groups. Žarko?

ŽARKO KECIĆ: Yeah, I just wanted to add, you mentioned that this is a small group. I'm ready to jump in as a full member of the group or if you need some help from myself.

DENISE MICHEL: Thank you very much. That's very helpful. Yes?

YVETTE GUIGNEAUX: We do have a comment in the Adobe room from Mr. Matogoro. Mr. Matogoro comments: "I would recommend the duplication elimination be done by the whole group before separating to subgroups. There are some overlaps among the other subgroups." End of comment.

DENISE MICHEL: Thank you, Matogoro. That's useful. I think flagging or eliminating duplications is something we can initially look at, at the full team level and then note where we'd like the subgroups to flesh out and further propose how they're defining these work items and suggesting how we eliminate duplication or bring more clarity to those items that are listed in multiple groups. Okay.

All right. Let's move on to Subtopic 2 then. Okay. Subtopic 2 is entitled "ICANN Security." It's addressing the activities that are

ICANN’s responsibility. It covers both internal security processes but also the additional security, stability, and resiliency related activities of not only ICANN staff but the ICANN groups – stakeholders in ICANN as well. So it’s important to note that this is ICANN security, not just ICANN internal security.

The topics listed in this group, as James has noted, definitely have some overlap with the DNS Security Group, potentially future threats as well, and the IANA transition. So I think there’s three areas for which we need clarity.

James?

JAMES GANNON:

Thanks. I’m just going to make a suggestion that I think is not terribly controversial. When we come to this deduplication piece and we have our final list – as you’re stating, we will have overlap – I would like to make the suggestion that it would be most efficient for the co-Chairs to assign the duplicated items to one subteam or the other, rather than going through a potentially long and convoluted exercise to flesh it out and maybe reword things. I’d like it just to be pretty clean and clear: “Okay. This one could potentially be in either one.” The co-Chairs go, “Well, that’s going to be in this one.” I just want to avoid another situation where what was supposed to be a 15-20 minute exercise ends up

become half a day and rolls on. I would just like to see we get it over and done with.

DENISE MICHEL:

Thanks, James. Other comments on that process contribution? And it suggests additional work and power for the co-Chairs.

We'll take on that suggestion. Eric and I will work together to flag assignments after the deduplication – we need another phrase for that – effort that we go through. We'll flag ones in terms of assignment to groups, as James has suggested. Thanks, James. But we'll certainly give the team members an opportunity to weigh in with any comments to make sure that people are broadly comfortable with how the assignments have been done.

Also keep in mind that these subtopic groups are intended to be a more efficient way of moving a detailed work plan and efforts forward more expeditiously. Everything is coming back to the Board, to the full team. Simply because a member is not on a subtopic team does not mean that they waive their rights to weigh in on all of those issues.

ŽARKO KEČIĆ:

I used to work with Boban. Boban is the one who led this. I used to work with Boban, and he's hopefully living at the airport and will join us on this issue.

There are a lot of discussions on what this subgroup should cover. I mentioned a couple of times that a comprehensive [questionnaire] that Boban submitted doesn't have to be used as a whole on all issues and all topics.

What we have to do first is to recognize where we are going to do our exercise regarding SSR ICANN security. I mentioned that in one meeting in which we should focus only on unique identifiers within the ICANN mission and not going further than that and not going inside ICANN because I don't think that's our mission: to review the security of ICANN as an organization. We should discuss that.

In regards to what James just said, I think, if we start doing our job immediately, we can very quickly recognize duplicates within the same subgroup and within different subgroups and clear that up. We don't need [inaudible] or something like that. I was hoping that we were going to do that in Madrid, but we couldn't finish that.

DENISE MICHEL:

Thank you, Zarko. Additional comments?

I think one of the points we'll definitely need to discuss as a team is what the appropriate level of the team's engagement is when it comes to internal security issues. Of course, at the top level, we

have a mandate to assess implementation of the first Review Team’s recommendations. The first Review Team did address internal security. So I think that’s an issue that we should talk through here in Johannesburg and make a note of that. There are different ways and varying degrees to which we delve into internal security-related issues.

Yeah. Go ahead, Zarko.

ŽARKO KECIĆ: Yeah. We have to discuss what they meant by internal security. Having internal security that just covers unique identifiers [I think in ICANN is one thing]. Reviewing how secure access is to the building of ICANN or how ICANN staff exchanges [inaudible] and the access to them I don’t think are issues that we should follow.

DENISE MICHEL: It’s a fairly vague and broad term. You’re absolutely right

ŽARKO KECIĆ: Yeah, but if you look at a [questionnaire], it is all covered there. So that’s one thing that the subteam and we as a group all have to discuss and decide what will be covered by Subtopic Group 2.

DENISE MICHEL: Right. Additional comments? James? You got that look. Go ahead.

JAMES GANNON:

Thanks. Zarko, I understand where you're coming from – I might have been told to bring the mic closer to me – and I understand the position. In the Bylaws, we are told as one of our many items to review the operational security of the physical network relating to the coordination of the unique identifiers. The coordination is performed by the ICANN organization. If we had a magical way to section off just the parts of ICANN staff and the ICANN organization that were purely facing the root zone and the IP address and the protocol parameters, that would make sense. I would never challenge that.

ICANN runs a single, homogenous set of processes, of infrastructure, of software, so by default, we are almost forced into looking at ICANN security posture as an organization in order to meet the piece of the ICANN organization that we are mandated by the Bylaws to focus on. We end up having to do that because it doesn't exist as a separate group or a separate department with their own infrastructure and their own processes. So there's no way that we can meet our Bylaws without looking at ICANN's internal security.

I agree, however, that we're not here to do an ISO 27001 audit on ICANN. I'm partially to blame for that, I believe, because it was one of my suggestions. However, my suggestion was not to do an

audit. It was to frame our approach as part of a framework, such as ISO, because it gives us topic areas to work at. But I understand where Boban is coming from; that in theory we could do down and do a full audit. But I don't think that's our role to good.

With regards to approaching in a structured manner on how you look at organization's security, let's take the topic areas that ISO 27001 has and use those to frame our questions to staff, to frame our information gathering, etc., etc., rather than doing a full audit. I don't think we have the capability, skills, or needs to do a full audit [inaudible] a "what do you do inside these areas?" and being able to look at the information that's given back to us and make an assessment of that I think is within our capabilities and skill sets.

DENISE MICHEL:

I'm wondering if perhaps Zarko and James could continue this discussion over lunch. It sounds like there's a way to identify where you two agree. That might form a useful basis for how we proceed in this area. Maybe you could come back after lunch with some suggestions for the team, Zarko.

ŽARKO KEČIĆ:

There is no issue. James and I agree. We have to agree and not just defend my standpoint because it is just my opinion. I'm

expecting help from ICANN staff. Steve, do you have any comment on this?

STEVE CONTE:

I think my own personal opinion on this is that this is a good opportunity to invite dialogue with the CIO or his designate at this point about what aspects of ICANN IT – well, to discuss any of those questions, really. I don't want to feed words into his mouth or into your mouth on that. So my next suggestion would be to have an invitation to ICANN's IT department, either the CIO or through a designate, to have a discussion about the subteam and about the goals and what you guys want to achieve out of this. Thank you.

DENISE MICHEL:

Thank you, Steve. Cathy?

CATHY HANDLEY:

Thank you. Totally support what you said, Steve – ah, touche. I think we definitely have to tighten up the list first because we don't want to waste everybody's time any more than necessary. So get the list tightened up and then go forward with the suggestion of calling in the CIO. Thanks.

DENISE MICHEL: Thank you, Cathy. We have just a few more minutes before staff comes to review the recommendations. Zarko?

ŽARKO KECIĆ: I have another proposal: to prepare questions for the CIO before we call him.

STEVE CONTE: I agree with that completely. I think that'd be a good way forward.

DENISE MICHEL: Great. Thank you.

All right. Could we scroll down to Subtopic 3? What would be useful is if staff could take the Google Doc – I'm not sure if everyone has access online, but can you put them in a Word Doc and send them out to the team and then...

All right. Thank you. Okay. DNS security is the third subtopic. This is ICANN's role in the broader security of the DNS and unique identifiers and role in dealing with threats to both of those. Again, some duplication, certainly with ICANN security in particular, and a little bit of overlap, I think, with future threats. This is the largest team, and it is in need of a rapporteur. I think, as with all of them, we need more clarification on several of the subtopic items.

I think something else that we need to grapple with is that part of where these work items came from were initial brainstorming exercises and discussions on the part of the team early on. I also want to remind you of discussions that we've had and that are reflected in our terms of reference, recognizing that there are many dependent systems and that, in some areas, it's important for the team to take an initial, broad look at an issue area to make sure they understand the interconnected functions, if you will, some of which are ICANN's responsibilities, some of which aren't. Simply because they're reflected on one of these subtopic lists does not mean it's specifically within ICANN's mission but rather, I think, reflects that it's connected or has an impact on ICANN's mission. So as we go through the prioritization and refinement process, it's also important to keep in mind that we'll want to be specific in flagging items that we want to make sure we understand and bring to bear on our work and items that are clearly within ICANN's mission.

With that, we'll stop our review of the subtopics and jump into the staff discussion of select SSR1 recommendations.

Do we have a specific order, and who'd like to start on these?

NEGAR FARZINNIA:

Yes. If you don't mind, I'll facilitate the briefing and turn it over to appropriate staff members for their part.

DENISE MICHEL: Great. Why don't we start with – please join us at the table. Grab some coffee and join us at the table and introduce yourselves. Thank you for taking time from what I'm sure is an insane schedule for you in Johannesburg to come talk to the team. We really appreciate it. Go ahead and introduce yourselves and then we'll turn it over to Negar.

AKRAM ATALLAH: Thank you, Denise. Akram Atallah. I'm responsible for the Global Domains Division, mostly implementing policies and the business aspect of things. Thanks.

SUSANNA BENNETT: Susanna Bennett. I'm responsible for several operational functions.

KIM DAVIES: Kim Davies, Technical Director at IANA, here to speak about the audits that we do within the IANA function.

DENISE MICHEL: Thank you and welcome. Negar?

NEGAR FARZINNIA:

Thank you very much. Good morning, everybody. Let's get started with briefings on SSR1 recommendations.

As you recall from the presentation we did in Copenhagen, we provided a slide that listed the 28 recommendations from SSR1, color coding the recommendations that we've already covered the briefings for in Madrid. Those are highlighted in gray. The cells that you see highlighted in dark blue are the recommendations we will cover in today's briefing. The remaining light blue cells are ones that we haven't done briefings on yet. Hopefully we'll continue to schedule them in the upcoming weeks in coordination with the Review Team.

This slide is just providing an overview of the recommendations that we're going to be covering in today's presentation, so I will not read every single one, as we have the in recommendation slides.

With that, we'll go into the strategic and operating plan section of this presentation. There are four recommendations – Recommendations 2, 7, 8, and 17 – that have all been addressed. We have the strategic five-year operating plan and the annual plan. I've grouped them together. Just as a reminder, since it's difficult to remember these recommendations, I'm just going to read off the recommendation, and then we'll dive into the details of how we go this implemented.

Recommendation 2 is requesting for ICANN’s definition and implementation of its SSR remit and limited technical mission to be reviewed in order to maintain consensus and elicit feedback from the community.

Recommendation 7 is asking for ICANN to build on its current SSR framework by establishing a clear set of objectives and prioritizing its initiatives and activities in accordance with these objectives. The process should be informed by a pragmatic cost-benefit and risk analysis.

Recommendation 8 is asking for ICANN to continue to refine its strategic plan objectives, particularly the goal of maintaining and driving DNS availability. The strategic plan and SSR framework should reflect consistent priorities and objectives to ensure clear alignment.

Last but not least, Recommendation 17 is asking for ICANN to establish a more structured internal process for showing how activities and initiatives relate to specific strategic goals, objectives, and priorities in the SSR framework. It should also establish metrics and milestones for the implementation.

With that said, let’s talk about ICANN’s planning process. The planning process as a three-fold approach in that we have a strategic plan in place, a five-year operating plan, and an annual operating plan and budget.

The strategic plan is developed with community input, updated every five years, and is designed to shape ICANN’s priorities and inform its budget and drive activities. The five-year operating plan is also developed with community input. It’s updated annually. The annual operating plan and budget is derived from the five-year operating plan and budget.

In October of 2014, we established a new strategic plan for the fiscal years 2016 through 2020. As you can see in the list below, we have five main strategic objectives. Of these five, the second one – Strategic Objective 2 – is to support a healthy, stable, and resilient unique identifier system.

Now, how do we support the strategic objective. In three different ways: by fostering and coordinating a healthy, secure, stable, and resilient identifier ecosystem, by proactively planning for changes in the use of the unique identifiers and developing a technology roadmap to help guide ICANN activities, and by supporting the evolution of the domain name marketplace to be robust, stable, and trusted.

Now that I’ve covered the overview, I’d like to have us dive into the details of Strategic Objective 2.1: to foster and coordinate a healthy, secure, stable, and resilient identifier ecosystem. It’s shepherded by Akram. With that said, Akram, if you don’t mind, please walk us through ICANN activities [that it affects].

AKRAM ATALLAH:

Thank you, Negar. As you can see, every objective drops down to a set of portfolios, where we actually have projects underneath the portfolios. I don't need to explain that beneath because you did this, but maybe for everybody else's benefits.

In these objectives, we have these four portfolios, which are targeted toward fulfilling the objective itself. Delivering service to the ICANN community according to service level targets, which is – actually, if you see on our KPIs now we have, for every one of these portfolios and objectives, we have KPIs that we show. It's a live web page where we update regularly our performance there.

But also within our different elements, where we do the GSC or the Global Support Centre, we have all of the requests that come in, and we respond to them. We have SLAs on that and you can see them. The IANA function has SLAs on its performance and we can show them. For most of the services that we provide, we actually have SLAs and there is actually data against that that is shown in there.

If you look at them, that's very granular now. We went down to the portfolio levels. These are more ongoing operations. You have the IANA department operations. You have the IANA system enhancements, advice, registry management, the Global Domains Division operation, the global customer support – I think

we call it now the Global Service Centre (GSC), product management, as well as implementation of the IANA functions stewardship transition, which is done now. That portfolio is still there because of Work Stream 2.

We have all of these portfolios. Within these portfolios, there is a set of projects underneath, and each one of these things actually tries to move the KPIs of the portfolio itself. Then the collection of those KPIs is trying to move the KPI of the objective all together.

All of this information is available on the web, and if there are things that you think are not actually driving the objective or are missing that should be there to drive the objective, I think that we would be more than happy to look at them and then see how we can actually prioritize them so that we can better serve the community.

The Key Performance Indicator metric is the percent of service level targets met across multiple departments, and that metric is also there and we update it regularly.

The overall SLT performance of GDD, for example, you're seeing that right here – it's actually almost always meeting the target levels. I can't see everything here that we measure, but I think it's all updated on a regular basis, and we're very strict on those.

Now, I think that the one thing that I still think we should do better is not just looking at the time that it takes to meet a requirement but also the quality of the services that we do. That's very hard to measure. We're doing surveys now. When somebody enters a requirement, when we close the ticket, we ask for them to actually update a quick survey on whether we meet their needs or not. We're trying to collect those. We don't get a lot of feedback on that, but we're trying to get more of these so we can point to the quality of the service, not only the timelines and the meeting of the service.

On Strategic Objective 2.1, there are a whole bunch of success factors. I don't want to read the slides, but they're all live and they're all in the strategic plan. Let's move to the next one.

NEGAR FARZINNIA: Actually, this covers Strategic Objective 2.1. Any questions for Akram on this particular objective?

AKRAM ATALLAH: This is more of an operational objective, so you see all of our operations in there. We used to have also compliance in there because although it does report to me it's one of the operational metrics. Then we moved it to another objective. So you'll have a

good representation of our SLAs and how we're performing against them on all of the operational metrics.

DENISE MICHEL: Thank you, Akram. Yes, go ahead, please.

NOORUL AMEEN: Can you please go to the slide [15]?

DENISE MICHEL: If I could remind everyone to –

NOORUL AMEEN: No, no. 14. Sorry.

DENISE MICHEL: Please state your name before you talk and speak into the mic. We have a couple or remote members.

NOORUL AMEEN: Ah, yes. I'm Noorul Ameen from South India. Could you please go to Slide #14? In the previous slide, you were mentioning about the security operations. What I can see in this slide is that it's more on the operations slide, so there is no abuse support or any security

violations. There is no specific department or operation center for handling those kinds of requests.

AKRAM ATALLAH: I'm sorry. Can you go back to the previous slide?

NOORUL AMEEN: Yes.

AKRAM ATALLAH: Yeah. No, [inaudible] title [inaudible]

NOORUL AMEEN: Healthy, secure. Secure means abuse support, operational implementations.

UNIDENTIFIED MALE: Yes. Basically, you'll see that Objective 2.2 is more targeted towards that because we don't have assets that on the identifiers themselves, we don't hold the assets that we need to secure. The assets that need to be secured that are outside of ICANN. So, I understand what you're looking for. What we do is more security frameworks. We provide white papers. We collaborate with the community on things, but we don't have a [knock], for example, for the identifiers.

NOORUL AMEEN: But still, we could have [inaudible] like [adversaries], alerts, and all those kind of cues. So, all this are specifically for the operational implementation part. So, operation and security, there's a tradeoff, I feel. So, at least some departments should take care of this abuse report and security operation just like in an organization, the operational [way is] CTO, and CCO is different.

UNIDENTIFIED MALE: I understand but so on the abuse side, we are developing a, I think, maybe the security team can talk about it, a program called DART, where we actually are looking at different feeds and trying to assess security of the TLDs out there. We also have a... what we call SLA monitoring system. Our SLA monitoring system looks at all of the TLDs out there and looks at their uptimes, when do they actually drop off, and so we have some good measuring systems for making sure that the TLDs that are out there are up and running, and if they have an issue, we actually trigger a compliance ticket so that they can go after them and make sure that they're up and running.

That's not reflected in here, so I don't know if it's reflected in the compliance area or not, but that's something we can add to this.

UNIDENTIFIED FEMALE: To clarify, Akram, I think that's covered in the other objective that you have coming up, so we probably will be talking about it. Okay. If there are no further questions, let us move on to Strategic Objective 2.2, and Steve, I'll turn it over to you.

STEVE CONTE: Thanks. This is Steve. Before we get on to that, just to a little bit of what Akram's saying, too, and to address the question of the word "secure," I think we should look at the three words, security, stability, and resiliency, all together because this is more of a holistic approach, and if we look, the security doesn't necessarily need to be a tool or a way to monitor progress or the traditional IT type security. We look at what's wording and policy and contract.

And two, we're looking at building a more stable and resilient Internet, and so the SSR touches on those aspects, even though there's no overt IT security piece to it. I don't know if you would agree with that or... Okay, Akram's not [inaudible] on that.

So, addressing Strategic Objective 2.2, this was, arguably, one of the causations of the formation of the Office of the CTO. The SSR 1 convened prior to David Conrad joining ICANN and forming the Office of the CTO. So, part of this was how to address the strategic

objectives and the subsequent portfolios beneath it, and so when we're looking at how to build roadmaps on technology, that causes or that one of the ways to do that was through research. And so David has created a research team now of five or six people to look at the causality of some of the technical aspects of unique identifiers and where it's going and what it's doing. So, we have someone looking at root data. We have someone looking at middleware boxes in relation to DNS builds within those boxes. We have other projects going on, as well, in that.

We do find it challenging, and I'll put this out, a request out to the Review Team either in the form of recommendation, or if you guys just have ideas, we find it challenging to create meaningful KPI and graphs on this, so you won't see pretty pictures in this section.

In our relationship to our training, we could count heads and tell you how many people we trained, but it doesn't necessarily speak to the impact that that training might have made, either be it in the public safety community with the DNS abuse, the DNS operations community with ccTLD training or DNSSEC training, so we're constantly struggling how to reflect the work we do because we are a product list department. We don't have widgets to count. So, if it comes out through a recommendation or if you guys just have good ideas and want to share, I'm open and all ears on that.

We are working with the Technical Experts Group. This is an unofficial – maybe not unofficial – informal group of experts in the technology field that present at a semiregular basis at ICANN meetings and are also available to provide technical expertise to the Board if they have questions and that mostly fill us with alternate or future technologies. We tend to have presentations or sessions at ICANN meetings and I think we’ll be probably having some in Abu Dhabi, so I invite you to look at the schedule or we’ll bring it to the team if there’s any interest in that at that.

WHOIS is kind of interesting because OCTO doesn’t necessarily touch the WHOIS implementation and service and improvements, so I honestly couldn’t... Yeah, please, Akram.

AKRAM ATALLAH:

So, on the WHOIS bullet points that you see there, we definitely our Compliance department enforces current WHOIS policy, and most of our tickets that go to Compliance are actually WHOIS tickets. We are continuously identifying improvement with the accuracy and stability of the WHOIS system. If you recall, we did an ARS, actually positive recommendation from the WHOIS Review Team.

The ARS is a system that actually you can go see online. We do, right now, we started with once a year getting about 100,000 samples of WHOIS records that we analyze and review the

accuracy of and provide reports on it. We moved now to twice a year, so every six months, we get 100,000 samples of WHOIS records from across all of the TLDs, and we actually look at them, and then the bad tickets we also send to Compliance, so we not only do the analysis and post the reports, but we also for the tickets that don't meet the contractual obligations, we actually move them to Compliance to augment, to make sure that they are fixed.

And then we are implementing right now on the WHOIS record Thick WHOIS policy that's ongoing right now. There are three TLDs that are not Thick right now that are moving to Thick and there's a plan right now in motion. We have implemented also the consistent labeling and display policy and now we are working with the community on the cross field validation and we're trying to identify a source that could do that. We know that it's not going to be uniform globally. It's very hard to actually get an address cross field validated globally, but at least areas where it is possible, we can do that. So, we're working with all of these things and pushing all of these policies, and addressing privacy and protection concerns. This meeting is all about GDPR, so I think you'll see a lot of sessions in there that we're dealing with, so these are the four bullets that we're definitely doing a lot of work in this area.

DENISE MICHEL: I have a question and I think Noorul has, as well. Could you remind us, Akram, what ARS stands for?

AKRAM ATALLAH: Oh, God. I'll get you a reply on that.

UNIDENTIFIED MALE: What are we checking? RDS?

DENISE MICHEL: ARS.

UNIDENTIFIED MALE: ARS.

AKRAM ATALLAH: It's active or, I don't know. We'll get you the –

UNIDENTIFIED FEMALE: Noted, Denise. We'll get you an answer back.

DENISE MICHEL: And then just to follow up and I'll turn this over to Noorul. So, let's start a queue. I think we have Noorul, James, and Kaveh. Accuracy reporting system, for the win. Thank you, Akram. Does

the WHOIS page on ICANN contain all of the items that you ran through? Will the team be able to find sort of the status on those elements there, do you know?

AKRAM ATALLAH: So I don't know if all of them are in one webpage. I don't know that there is a webpage for the ARS, where you can find all of this information. Karen?

KAREN MULBERRY: Thank you very much. In terms of the WHOIS information, there is a WHOIS knowledge center, and I can send the link out to the Review Team, that actually touches upon all of those elements. And it will throw you on to then deeper areas. Whoops. Sorry.

DENISE MICHEL: So, it has links to cross field validation work and all that. Great. Thank you.

KAREN MULBERRY: Yes, it does. So, all of that will... And I will make sure the Review Team gets that.

DENISE MICHEL: Noorul then James and then Kaveh.

NOORUL AMEEN: This is Noorul Ameen from South India. Actually, Karen answered my question. See, my question is specifically for the WHOIS database. Is there a moment to restrict WHOIS database to public access? And if it is so, how operations, national operations centers like [inaudible] [can avail] the WHOIS database?

AKRAM ATALLAH: There is no restriction for public access to the WHOIS records.

NOORUL AMEEN: As of now, [inaudible].

AKRAM ATALLAH: As of now. There is an RDS Working Group, which is reviewing the future of WHOIS architecture, if you want, and how it's done and there is talk in there about multilayered access, but it's all in the policy development phase, and if you want to know more, I think you should participate in the RDS or read what they do. But I don't know where they are on that. Thanks.

UNIDENTIFIED MALE: RDS I believe will be meeting this week. I'm looking at Karen like she knows. But yeah, she does know. Okay.

KAREN MULBERRY: Excuse me. The RDS-WHOIS2 Review Team has just recently been formed. They are not meeting officially at ICANN 59. There will be an informal session of the Review Team on Tuesday evening, so it's more of a get-together of the appointed Review Team members that happen to be participating at ICANN59.

UNIDENTIFIED MALE: But the RDS WHOIS Working Group is meeting this week, right?

KAREN MULBERRY: Informally.

UNIDENTIFIED MALE: Not the Review Team. The working group.

KAREN MULBERRY: Yes. The GNSO PDP Group is meeting. I can send out all of that detail to the SSR2 Review Team members, if you're interested. There are several WHOIS-related activities happening along with the informal session of that Review Team. So, if you wanted to meet the Review Team and expressed some comments or concerns or issues you'd like them to look into, there's an opportunity on Tuesday evening to join that informal session.

DENISE MICHEL: Thanks. I'd like to note that Alain has joined us – welcome, Alain – and also, Xavier, the CFO, also came in after introductions. And also Theresa Swinehart, as well. I think James and Kaveh had questions. Or have they been addressed, their issues? Okay, great.

STEVE CONTE: Just to continue then. In the spirit, we [inaudible] the WHOIS and it being under Strategic Objective 2.2 and in the spirit of that, as well, just to speak, even though there might be a specific champion, executive who's championing that strategic objective, it does cross paths. We are within Office of the CTO working on the Identifier Technology Health Indicator Project, which actually, arguably, would fall into 2.1 about building a healthier Internet, so we look at these and moving forward, there might be one single executive champion but I think there will be cross work that we can be speaking to on that.

And also, in relation to abuse reporting tool, that would, I think, cross between 2.1 and 2.2. It'll show some of the health of the Internet and provide neutral publicly accessible data, which people can drive their own results from and ideas from, as we saw in Madrid. [inaudible], can you go to the next slide? Thanks.

So, briefly on this one again, we're struggling. The ITHI, the identifier health index, is probably the most measurable thing we have followed by the abuse reporting too much. We are always looking on how we can better capture the work that Office of the CTO and OCTO's SSR team can do and show the community, so both as a Review Team and community members, I'm open to suggestions on how to improve the way that we report to the community and can communicate to the community. Next slide.

DENISE MICHEL:

Steve, can I ask a question? It was a very dense slide right before this one and the ITHI, which appears to be a really useful project that I'm looking forward to seeing, come to fruition that as a KPI, it seems a bit limited given the scope of the portfolio. Are there other KPIs under consideration?

STEVE CONTE:

Thanks, Denise. That's an actually really interesting question and would welcome dialogue via one-on-one or with the Review Team on that, because for me, the question is, is the ITHI or the abuse reporting tool as itself, is it a KPI? Is it a performance indicator as much as it is a... I'm sorry, I was speaking with Susana earlier, accountability. I [want to use] the right term here. Accountability item, indicator, an accountability indicator. Both of ICANN but of the community and the Internet ecosystem. So, I

agree that it's certainly an interesting project and I'm interested in looking forward to seeing how we can capture that and reflect it both as an indicator of how well ICANN's doing within that space but also the community and the ecosystem itself.

[NEGAR FARZINNIA]: Thanks. Let's talk about the key success factors on 2.2, please.

STEVE CONTE: So, actually, that speaks right into the KPI information we're talking about. We are looking to improve. We are doing work. We as a bunch of engineers find it difficult sometimes to speak to humans and we're looking then how to better and more effectively communicate the work that we do and show that there is good work being done. We have a lot of research going on right now. We have the introduction of the Open Data Initiative that the community has expressed strong interest in, so we've started. We're hoping to stand up a beta or an alpha, I'll say, before Abu Dhabi, to speak about that. And we're just learning how to communicate with other carbon-based life forms.

AKRAM ATALLAH: Let me highlight the third bullet here because I think it's very important. The Universal Acceptance program is actually a critical initiative that we've taken on, so to make sure that the

IDN's acceptance, not only IDN's, but also longer TLD names are accepted just the shortened one like the legacy ones, so that's a major undertaking. Let's work with the community on this and I think we've made a lot of progress there, but we're identifying even like libraries and we're getting down with the nitty-gritty of the technical resources that need to be updated so that they allow for IDNs as well as for longer character domain names to be accepted across the board, so I think that's a very important initiative that [inaudible].

DENISE MICHEL:

I'd like to welcome Boban who's just joined us, as well as a member of the team. To follow up on that, Akram, could you speak briefly or, perhaps, send us some follow-up information on how staff tries to integrate its sort of abuse mitigation related efforts into the Universal Acceptance initiative? And I'm speaking here of the intersection of, say, the relatively new IDN demographic attacks and some few new gTLDs that have extremely high rates of percentages of abuse and how that impacts the drive or universal acceptance of all and how you handle those.

AKRAM ATALLAH:

So, actually, we are in the process of doing the analysis across all the TLD space and from [inaudible] perspective and now we're

doing [inaudible] perspective to try to identify is there something that's alarming that we should go after and how can we go after that. But the IDNs don't show relatively there in the noise level when it comes to abuse. We haven't seen much of that.

Now, if you're hinting toward emoji in the domain names? Is that what you were –

DENISE MICHEL:

No, no. It was more of a broader question of sort of balancing two objectives that have some connection where you're essentially asking the world to accept all of the new gTLDs, build it in up and down the system at the same time. I think there are many entities that are struggling with trying to protect customers and consumers from the ever-evolving ways of malicious abuse and attacks and those types of things and whether there's [inaudible] discussions [inaudible].

AKRAM ATALLAH:

Yeah. So, it's actually a dichotomy, right? We've always balanced these acts but really, for us enabling of the new gTLDs specifically the IDNs more generally the longer length TLDs is actually a separate issue from where the abuse is happening because there is no correlation between the two that says, "Oh, the longer (let's say) the TLD name is, the more abusers on it or vice versa."

So, we separate the two and one initiative does not actually translate into limiting the other initiative. So, we do both in parallel and now we're working with the community on the studies that we're doing on the abuse and figuring out how we take that to effect. What does it mean if we have all this data? Do we go after them in Compliance? What if we can't go after them in Compliance, do we name and shame? Is that an approach?

So, we're talking with the community about what are the best approaches to use this data to get to the result. Because most of the community, especially the contracted parties that come to the ICANN meetings, they're not the bad actors. So, we need to find a balance between do we throw the data at the wall and then see what sticks or do we actually have a targeted initiative that this data drives us to do? So we're at this juncture right now.

DENISE MICHEL: Thank you, Akram. That's very useful. Steve and then James. Sorry. James and then Steve.

JAMES GANNON: So, I have nothing of substance. Can I ask the speakers to speak up? Because the remote participants are having trouble hearing.

DENISE MICHEL: Thanks, James.

STEVE CONTE: Just to feed a little bit more to what Akram was saying, too. I think one of the things Office of the CTO is working very closely with GDD and with [inaudible] from Compliance and what I'm seeing as an individual is that trend about abuse and compliance in that respect was mostly it was a complaint-driven process, and that's one of the reasons why, and then ICANN would evaluate and take action or not, depending on the outcome from there, based on that trigger.

And I think one of the things that we're hoping to start accomplishing is using the neutral data, the publicly accessible data that we're getting from the various feeds from SURBL and APWG and all the other feeds that Dave Piscitello is working on with the abuse tool and some of the other research feeds that we get is to build a neutral set of data that we can start looking at trending and then actually address, Denise, your question, and really it becomes a bigger question of is trending an actionable a trigger item or is it something that we can just look at on how to do? And I don't think that's above my pay grade, for sure, and I think it's not necessarily even a technical question, even more about.

Now that we're utilizing the publicly available data, what are we going to do with it? Are we going to pro action or are we going to just use it to back up the complaint-driven process already?

DENISE MICHEL: Are there other questions before Steve moves on with this? A comment in the [inaudible].

[NEGAR FARZINNIA]: We have a comment in the Adobe room from Mr. Matagoro: "To what extent do you work with the relevant standards bodies, Unicode, and the IETF over the issues with the use of IDNs and longer-label TLDs?"

STEVE CONTE: I'll take that one. Thanks, Geoff. I don't have a specific answer to that. I will say that the Office of the CTO does participate in the IETF process. I know that other aspects or other avenues of ICANN does, as well. I know Francisco Arias from the GDD team also participates as well as members of PTI. So, I will make sure that we report that question and put that out. I don't have specific answers about the IDN and the items to that specific question and don't want to misrepresent an answer to that.

DENISE MICHEL: Questions? Go ahead.

STEVE CONTE: [inaudible], can you go to the next slide?

[NEGAR FARZINNIA]: Yes. I actually think that we are done with 2.2. Strategic objective 2.3 is shepherded by Akram, so with that, I turn it over to you, Akram, to talk about this item. Denise had a question and you're welcome to answer it sort of later but kind of jumping back to I think your comment about needing to look at the quality of the strategic objectives and the portfolio project management process. Could you, I think it would be helpful to elaborate that, on that a little bit.

I think SSR 1 recommendation was made regarding the planning and budgeting and project management and providing more transparency into SSR-related activities.

AKRAM ATALLAH: We're not like a company that creates product, so you do a product and you launch it, and then next year you have a new set of products that you're working on. We are still working on the same thing but we're working on improving it in different aspects, and so there's a journey going on.

So, although the KPIs might look like they're not green because yeah, where I desire the [inaudible] this goal to be is far but did I actually achieve enough progress in this year toward that goal is really what we're measuring. So, that might be the reason why you see a lot of greens. And some of the KPIs, that's easier than others. So, if you look at the 2.1 when we were talking about SLAs. SLAs is very easy one, right? You set an SLA, a set of SLAs and you measure them and you say either I pass or I don't.

So, you aggregate all of these things and you have one metric. And so it becomes very easy, but then you look at other goals and you say, "Okay, security, stability, and resiliency of the identifier ecosystem." A lot of it is objective but a lot of it is subjective, too. So, there is both hands in there, so how do you measure something that is very black and white or it's very difficult to put a KPI to that that says, "Oh, yeah. 100%"?

Because today, what you might have, you might do everything right on security today and then there are new bad things happening in the market and next year you're scoring nothing, right? So, it's a moving target, it's a change in environment, it's a very difficult KPI to put in place that you can say, "Yes, if I did these things, it's 100% my goal." So, it's just continuously improving and continuously making progress is our goal on a lot of these different things. So, it's a challenging thing.

But I can tell you for sure that the team every year sets higher targets. So, on the things that are measurable, every year we look at it and say, “Well, we’re at whatever, 70%, so I achieved our target. Could we go and target 75% for next year?” And so these are things that we do on a regular basis.

On the not-so-measurable things, it is more difficult to do that but we continuously put new programs in place to keep with the times but also to improve our performance.

DENISE MICHEL:

And then when it comes to evaluating the sort of quality of the strategic objectives, is that like a formal [part of] a consultant to do a review and it’s from a process? Or is it something that you’ve woven into the sort of staff planning process?

AKRAM ATALLAH:

So, just as we do always every year try to continuously improve and raise our measures, it depends on the KPI itself. It depends on the projects and that you have underneath the portfolios. Some of them might need a help from outside the sources, but I could tell you, for example, for the 2.3, which is health metrics, we started, for example, looking for an index, and then we said maybe an index is not something good because you need to update it all the time. So, now we’re moving to indicators and that

might be a set of indicators that we look at, and now we're thinking maybe we need to have some economist that comes in and helps us and helps the community formulate what are these indicators that cover a good, healthy market, for example.

So, it depends on the KPI and depends on what we're trying to do. Sometimes, we can do it ourselves, sometimes we need somebody from the outside, but the goal is to always keep moving forward. I want to highlight that when I talked about the quality, I was talking about the SLAs. The SLAs measure response time but it's also important to measure the quality of the work that we're doing, so just because we open the ticket and we closed it in record time is not necessarily just right. We need to make sure that we met the needs of the requests, all right? So, that's where we introduced a survey at the end of every – when we close a ticket, to say, “Did we meet your needs or not,” and then it's a very simple one-to-five kind of scale and we get that so we can measure our performance on that. Thanks.

DENISE MICHEL:

Any other questions before we move on? And Francisco has joined us. [inaudible] you missed a question on IDN so we'll circle back to that. I'm sure Steve remembers it. Negar?

NEGAR FARZINNIA: Thank you, Denise. Akram said we are on Strategic Objective 2.3, so I turn the mic back over to you to talk about our activities pertaining to this strategic objective and go over into portfolios after.

AKRAM ATALLAH: So, as we talked earlier about the name marketplace health indicators, we're working with the community on that. The CCT review is also providing a lot of feedback into that because some of their recommendations will be metrics that we want or indicators that we want to look at for a healthy market. So, we have a survey to look into the multi-stakeholder satisfaction. We actually have multiple surveys, IANA has its own surveys, we have some surveys ourselves within PTI and ourselves with PTI on these things that we will continue to improve and grow.

We have also an initiative from the Board to improve our service orientation of the organization and that is going to look at all the surveys we have and see where we need to amend them to get feedback from the entire multi-stakeholder community on our performance and how we serve them.

The shows stable healthy year-over-year growth in the domain name industry. Basically, the goal of this is to show that DNS is still relevant because a lot of people say, "Oh, there is the DNS is going to go away because there is now apps or after that, it

becomes, there is a new technology out there that's going to take over the DNS." And so we want to make sure that the DNS is still in demand and, therefore, still healthy and ongoing.

Finished the current round of the New gTLD Program and have agreement on the start of next round. That's a goal for us in the community. We're working with the community on that and there are a few projects underneath. We're in the end of the New gTLD Program but we haven't be able to close it completely because there is some, I think, about 35 to 50 remaining TLDs that could be delegated out of the 1932 applications that we got, and these are taking the longest time because they're in dispute mechanisms or other things, and we're trying to finish them all and then get them to done because that's actually a cost for the organization and, therefore, it's a cost for the stakeholder community. That we would like to move off of and move our resources to other areas.

As you can see, the portfolios that we work on – I can't read this – illustration directory services analysis and development. So, this is a lot of the WHOIS stuff, contacting the policy, supporting the policy processes. I'm sorry. I can't read this far but you can read it just as I could. Yeah. There is a placeholder there somewhere.

NEGAR FARZINNIA: No. It's an item that was removed from this strategic objective just to not mess with the order of the items listed on the portfolios. The numbering has been kept in place. That's the reason for it.

AKRAM ATALLAH: All right. They were moved to 2.15 based on the feedback received from the, okay. The G technical services. This is an area that we're really focusing on right now. We are doing a lot on in the new gTLD contract, there is a lot of technical obligations that the contract parties need to meet. We are developing – and Francisco can talk to this more than me – we are developing a set of technical checks that we want to do on a regular basis to make sure that everybody's doing what they need to do, but also we have an SLA monitoring system, as I mentioned earlier, that Francisco and his team support and help TLDs figure out when something goes wrong and notify them and make sure that they actually get back up and we are opening this up to anybody that wants to get the information that we get, so that they can improve their systems as quickly as possible.

Then on the IDNs, as we mentioned, we're doing the universal acceptance that's a major initiative for us and the community, and then on the New gTLD Program, we're finalizing the last pieces of those. We're in the final throes of that. And then... Yes?

DENISE MICHEL:

Before you move on, just a question on the previous one. On the objective of a healthy year-over-year growth in the domain name arena, could you speak a bit to how you integrate some of the security and stability objectives into that? And also, I assume it covers both gTLDs and ccTLDs. So, in addressing sort of the healthy year-over-year growth, I'm particularly interested in how you're defining healthy, and if we see, say, a TLD that again has perhaps a new gTLD that has a very high percentage of abuse that is giving away names for free, extremely low cost and attracting a lot of sort of malicious abuse type of domains, do you consider the simple fact that it may have some high numbers or quick growth rate to factor into health? So that's kind of an example, but so how do you tackle the healthy aspect of the year-over-year growth in both gTLDs and ccTLDs?

AKRAM ATALLAH:

A lot of it has to do with the New gTLD Program. So, being able to move the gTLD Program forward is one of the metrics that we look at for increasing that, removing obstacles like for IDNs, so making sure that IDNs are accepted everywhere should, in our view, be the future of the growth because all of the growth should be coming from the developing world, and if that's the case, then we

want to move the IDNs forward and that's what we call healthy growth, right?

We're not actually looking for promotions or inviting bad illustrations as part of the growth. We're not looking to count these because this also [inaudible]. We want to make sure that it's steady, continuous and steady growth on a regular basis that there is demand for the domain name system that it is actually not being replaced by any other technology. These are the kind of things that we're looking for.

DENISE MICHEL: So how do you address whether the demand is healthy or part of the demand is for sort of malicious abuse, for instance? Do you distinguish that?

AKRAM ATALLAH: We are not right now looking at the number of registrations as a healthy growth. We're looking at these metrics that I talked about. Removing the barriers for IDNs, finishing the New gTLD Program. These are the metrics we're looking at for very high level, yes. Next.

DENISE MICHEL: We have another. Yes. We have something in the chat room.

UNIDENTIFIED FEMALE: We have a comment from – we have several comments, rather, from Geoff Huston: “How is the expansion of the namespace with more gTLDs contributing to the security and stability of the Internet? Who reached that conclusion and on what basis?”

Do you guys want me to do one comment at a time and then respond to it?

AKRAM ATALLAH: Yeah, sure. So, the expansion of the top-level domains is a policy that the community developed and agreed on, and basically it’s a good policy that we implemented. The policy came through the normal multi-stakeholder process. Thanks.

DENISE MICHEL: And I think if I’m understanding Geoff’s question right, it’s how you’re applying, I think it’s similar perhaps to mine, and it’d be great if Geoff could elaborate on how the security and stability obligations and goals were overlaid on the healthy growth of the domain space.

UNIDENTIFIED FEMALE: While he continues on with the comment number two, considering that the majority of the registered domain names are

never actually in, I think he says initiated, in the DNS and fall under the general category of speculative registrations, what metric is being used to ensure a healthy DNS marketplace? How do speculative names registrations contribute to security and stability?

AKRAM ATALLAH:

So, I mean, I think that we are associating there are a lot of assumptions made these statements that I don't necessarily have data to back that up or to deny it, either way, but what I would say is that I don't know that there is a correlation between investments in domain names and the security and stability of the domain name system. So, I don't want to drive any conclusions because I don't have any data that correlate or actually negate that statement.

But at the same time, I think that what we are doing is we are doing our remit, which is promote competition, choice, and innovation in the Domain Name System, and that's these are actually the guiding principles for why the New gTLD Program was initiated, and I think that it's very clear the choice is available today that you have more competition in the marketplace and we are starting to see the – well, we saw a lot of innovation in the business models of the TLDs but I think now we're starting to see the beginning of innovation in the way TLDs are being used and I

hear a lot of anecdotal information about plans of what TLDs are coming out with and I think in the next 6 to 12 months, we're going to see a lot of innovation in that space.

So, I think this is you don't actually freeze everything you do because you want to have security and stability in the marketplace, resiliency in the marketplace. You have to move on both trends. You have to move on the competition choice and innovation as well as you move on the security, stability, and resiliency of the marketplace. So, we have to do both and I think that we are what we've shown here today is that along the way, we are doing a lot more things for the security, stability, and resiliency today than we were doing before the New gTLD Program, and I think that's the message we're sending.

DENISE MICHEL:

Just a note. Geoff has a follow-up question and Cathy hers up, as well. Great.

YVETTE GUIGNEAUX:

Okay. His follow-up comment was, I understand that this is community supported but where is... Hang on my chat just moved and I'm leaving you guys all hanging. My apologies. That was me saying this. This is Yvette saying that my chat just moved. My apologies.

Okay. This is Geoff's comment. We're back on track here. "I understand that this is community-supported but where is or was the security aspects considered?" And then there's a few, James has made a comment and Cathy tried to help out Geoff.

CATHY HANDLEY:

Thank you. This is Cat. It's specifically, Akram, what he's asked is like speculative registrations and that kind of stuff. Understanding totally that how the work that's been done on the new gTLDs [in that] but to more look specifically at what issues has that created that onslaught of the new gTLDs, speculative registrations, that sort of thing. Thank you.

JAMES GANNON:

I just have a clarification on Geoff, as well. We're specifically talking about the implementation by ICANN staff of community policy. Because, obviously, there is an aspect of well, the community develops the policy and the onus is on us to look at security and stability in our policy development, but one Geoff's points is when the community says go, how does ICANN make sure that the going is done in a secure and stable manner and potentially how can that be improved.

AKRAM ATALLAH:

So, this is a very big question because security and stability and resiliency of the DNS covers a lot of different things. But we can say, for example, that at the root level, we've done a lot of studies. We've metered the introduction of TLDs so it doesn't happen. We introduced 1001 day, so we introduced them over time and we did what we can to make sure that the stability is not affected. So, that's one aspect of the security and stability and resiliency that we introduced with the New gTLD Program.

The other area is that we actually have a lot more obligations in our contracts with the registries than we did before, for example, so that's what we hear when we have legacy contracts now moving and we say we're moving them toward the new gTLD contract is because the new gTLD contract has a lot more requirements on the TLDs to be more secure and stable. We just introduced, we agreed with the community now on 113b, which is spec 11 3b, which is what is the requirements that we have on the new gTLDs to do for scanning their zone and actually understanding the malware that's in there? And what is sufficient for them to do and the frequency of doing these scans, for them to meet their obligations? So, we're actually, we have a lot more initiatives in the new gTLD agreement to have a more security and stable TLDs in place than we had in the previous TLDs. So, I hope that answers the question.

DENISE MICHEL: James and then I'd like Yvette to make sure we cover all the questions in the chat. James?

JAMES GANNON: Thanks. So, not in a challenging way but just to clarify, so the main means that you see to do that in implementation is through contracts. It's through the registry agreements and the registrar agreements rather than that as an aspect, or is that what you see as the primary means for ICANN to push that SSR remit?

AKRAM ATALLAH: I would say that's the main mean because we don't have any other tools to use with the registries other than the contract. But at the same time, we collaborate with them on ideas and way to do things better, but I can talk about a lot of different things that we have in the New gTLD Program that we didn't have before, like any [inaudible] mechanism, like [inaudible] emergency backend registry operator. If something happens, how do you move the TLD from one place to another so that we continue operating the TLD?

We have COIs, which is our continuation of operations instrument, so basically every TLD has to put money on the side for that. If they went down, we can continue to operate the TLD for a while and not at the expense of the community but at their

expense. There are a lot of different things that are in the New gTLD Program that weren't there before that helped improve the stability of the DNS as a whole.

DENISE MICHEL: So I'm going to take a queue to make sure we get everyone. We've got Kaveh and Akram has to leave soon, so we got Kaveh, Cathy, and Don, and then we'll go back to the chat room, as well. Akram, when do you need to leave? Now-ish?

AKRAM ATALLAH: 11:00 was my meeting.

DENISE MICHEL: Okay. Talk fast, people, and we'd like to provide – well, we'll work with staff to provide some additional questions in writing.

AKRAM ATALLAH: Sure.

DENISE MICHEL: Okay.

KAVEH RANJBAR: So, just to contribute a bit to the answer because the question that Geoff is asking, first question on this one, is covers a lot of ground. And actually, one part, which I think we have to emphasize, is a lot of what ICANN organization does is implementation of the community policies, and many of the not complete all of the questions of Geoff but most of the ground should be covered by SSAC, actually. So, if there are issues, they should be covered by SSAC and I'm sure ICANN organization will take whatever direction as they have done with the [inaudible], so I think a lot of that actually should come from community. If they think there is threats from security threats or stability threats from some of these programs, that should come from SSAC.

DENISE MICHEL: Thank you, Kaveh. Questions for Akram before he leaves. Cathy and Don and then the chat list.

CATHY HANDLEY: Thanks. I'm having a conversation with Geoff, sorry. And he's looking more for something along the lines of being proactive. Everything that you described is very reactive. If, I don't know if you can answer it now or if you want to come back to it, but what sort of things did you do in order to make sure that we didn't find ourselves in a bad spot with the onslaught of the new gTLDs and that kind of stuff? Something.

AKRAM ATALLAH: I think that the question is more about policy than actually about what ICANN does, how ICANN launched the New gTLD Program, because a lot of these things were done in the policy implementation phase where wrote the Guidebook, there was a lot of debate, and there was a lot of comments and advice taken, and added to the program. I mean, I could mention a few things like the GAC advice and translated into the Public Interest Commitments that were added to the contracts, like what I mentioned earlier the looking at the EBERO and the health and the stability of the backend operators.

All of the areas that were of concern for the community were addressed in the Guidebook and, eventually, in the contract, and that's what led to the implementation. So, ICANN does not do things without the community asking you to do them.

CATHY HANDLEY: But this is just looking at technically what did you look at proactively to make sure that the stability and security of the DNS was there after you started doing the implementation.

AKRAM ATALLAH: So, for example, we put in SLA monitoring system and this system actually pings these TLDs from – I don't know how many nodes –

40 nodes around the world on a regular basis to make sure that these TLDs meet all of the technical requirements that they have in their contracts, which means they have to be up for a certain percentage of time. They cannot be down for more than X time. DNSSEC has to be up all the time. All of these requirements for security and stability are measured by this SLA monitoring system to make sure that they're always happening and then if there is a break in any one of these, then there is a we contact the TLD very quickly and we try to get them to resolve the issue make sure that they are actually secure and stable.

Maybe the question is so general that there is not going to be satisfactory answer, but if Geoff could hone in on a particular area that he's worried about, then maybe we can list the things that we've done on that particular area that could be helpful to for him.

DENISE MICHEL: I think we'll definitely have some follow-up questions. Don, did you have something for Akram [left] and is there anything else in the chat?

DON BLUMENTHAL: It's not a question. I just wanted to point out SSAC has done some work in this area. There are a few reports that are relevant with

specifically SAC090. I would have mentioned it before, but I wanted to get the right citation. There were some recommendations, particularly on ambiguity.

DENISE MICHEL: Thank you, Akram, for your time. We appreciate it.

AKRAM ATALLAH: Thank you.

NEGAR FARZINNIA: Thank you, Akram. Okay, everybody. What I will do is move through the slides that we were going to continue covering and go to the next section of the presentation. If you have additional questions, please provide it to use, and I'll make sure Akram gets it to provide feedback on the questions.

Before we move forward, Steve, where did we invoke Francisco's name in the previous set since he's here. Maybe we could close that out before we move on.

STEVE CONTE: Absolutely. This is a question, if you can answer. Otherwise we can come back to it in the e-mail response. At one point, Geoff Huston has asked on the chat room, "To what extent do you work with relevant standards bodies – Unicode and the IETF – over the

issues of the use of IDNs and longer-labeled TLDs.” I was wondering if that’s something you could possibly address.

FRANCISCO ARIAS:

Thank you, Steve. Francisco Arias from ICANN staff. I understand that question in regards to the ability to use IDNs and, I guess, longer TLDs, meaning the new gTLDs and [inaudible] introduced after them, the first gTLDs back in the ‘80s. In that sense, there is an initiative called the Universal Acceptance Steering Group, in which ICANN participates together with the communities – not an ICANN organization only. Actually, the community there is driving that and ICANN participates there and provides some budget support.

I’m not an expert in that field. We have a contractor that is leading the floor from our side, Don Hollander. I’m not sure if he’s going to be here in Johannesburg, but he’s usually in the other ICANN meetings. They have been working with the vendors. The focus has been on the vendors, rather than on the standardization bodies, like IETF or Unicode. That’s where, I understand, the gap was identified to be in the implementation as opposed to in the need for more standards.

Thank you.

STEVE CONTE: So it sounds like it's a multi-pronged answer, and to address it I think, correctly, we would still need to take it back and work on the relevant pieces to the right parties and get a more cohesive answer back to the review team, if that's all right.

DENISE MICHEL: That'd be great. Thanks, Steve. Francisco, do you also have involvement in the Service Level Agreement TLDs, or is that not your space?

FRANCISCO ARIAS: The SLA monitoring system? Yes. That's [mine].

DENISE MICHEL: Since we've got you here, before I move on, during the DNS Symposium in Madrid, one of the presenters noted that 32 out of 37 RSPs experienced failures. Could you speak to what's around that and how that was addressed by ICANN and also whether ICANN publishes the failure statistics in this area?

FRANCISCO ARIAS: That statistic is how many RSPs have ever had at least one failure in DNS. I believe that is what that statistic is. So that means they've had at least one. It could be a very short period [inaudible] or it can be a longer one.

What's the second part of your question?

DENISE MICHEL:

32 out of 37 strikes me as high. It would be useful to get perhaps a bit more context from you on what the ICANN organization's expectations and responses are around what sounds like a very high percentage of failures.

My additional question was whether ICANN publicly posts stats on failure rates.

FRANCISCO ARIAS:

The second question, which is easier to answer: at the moment, we're not publishing any data in that regard. We are planning to do so. I still don't have a date on that. We are trying to find the resources to give priority to this project, but it's in the queue to be developed.

In regards to what order we are doing it, in regards to the issues, with the SLA monitoring system and other systems, we have been in talks with the community since at least last year.

In regards to what can be done, one of the strategies that we were suggesting the community implement was to have some sort of RSP preapproval process [accreditation]. There are many names to what that can be. So we are in talks with the community about

how to go about implementing that. We think there could be a way for providing incentives for RSPs to improve their operation and also some way to punish, if you like, the RSPs that are not behaving according to the expected standards. But that's still an ongoing conversation with the community.

DENISE MICHEL:

If I may follow up, you currently don't have a clear response mechanism to RSP failures? Or did I misunderstand you? Also, can you just broadly give me a sense of staff's reaction to 32 out of 37 RSPs having experienced failures? Was that expected? Is that high? Did that cause staff to rethink its treatment of SLAs and how this is handled? 32 out of 37 experiencing failures seems pretty high to me and seems like an unexpected rate. Could you add a little more context to that?

FRANCISCO ARIAS:

I'm not aware of any forecast that we had in terms of what we would have expected on this. If I can be honest, I would not focus so much on the 32 out of 37 failures because those could be very short-lived, minor failures.

The one that I think called the attention of the community and that I will say also caught my attention is the one about the 27 instances in which the emergency thresholds were passed; those

27 cases since the launch of the new TLDs, in which an emergency threshold was reached. So 27 TLDs or 27 cases. These emergency thresholds are the ones defining the contract after which ICANN has the ability to declare an EBERO event and have this emergency backend registry operator take over the operation of the TLD.

In these 27 cases – these 27 cases as of December of last year – at the end we decided not to declare an EBERO event because either the TLDs did not have registrations, since we still have a good number of TLDs that are in the launch phase. So if you don't have registrants, what's the point putting EBERO in place?

In other cases in which there were registrations, we were working with the registries. In all the cases, we have been able to work with the registries. The registries have been responsive, and we helped them, as Akram said, to troubleshoot and find the issue. Then they implement the solution. So we worked with them to solve the issue, and in the cases where there were registrations involved, we thought it was going to be faster to let them finish doing what they were doing to solve the issue and to move it to an EBERO.

To provide more context in case you're interested, we have conducted two EBERO exercises, as we call them, on two different TLDs; one last year and one this year, a few months ago. These

were TLDs that were scheduled to be terminated. The registry had notified ICANN that they did not want a TLD anymore and wanted to terminate the TLD. So we asked them for permission to use their TLD to do this exercise.

So we executed that – a live EBERO transition. We simulated it as if they were failing, and then we took the TLD over in each case to a different EBERO provider. That gave us very valuable data in terms of how our process was working in regards to EBERO and what needed to be changed and what improvements could be done.

Also, in regards to the timing – how long does it take to take over the operation of a TLD? – it takes a few hours to do that. If you count the time of the cache studies involving DNS – because there is a cache that it takes – it takes 48 hours or so for those effects to not be seen anymore.

So it gives you perspective in terms of how much you can wait for the registries to act and to be able to solve the issue before you call an EBERO event.

DENISE MICHEL: Thank you. I appreciate it.

NEGAR FARZINNIA: I'm sorry. Just a comment because we have the rest of our presenters here only until noon and we have a set of recommendations left to go through. In the interest of time, if there are follow-up questions and the Review Team is okay with that, can we capture those and provide responses to them afterward?

DENISE MICHEL: Yes. We're ready for the next session.

NEGAR FARZINNIA: Okay. Perfect. Thank you. The next session of the presentation is pertaining to SSR-related budget and expenditures. It's going over Recommendations 20, 21, and 22, which have all been effectively answered in the same way.

Recommendation 20 is looking for ICANN's definition and implementation of its SSR remit and limited technical mission to be reviewed in order to maintain consensus and elicit feedback from the community.

21 is asking ICANN to establish a more structured internal process for showing how organization and budget decisions related to the SSR framework, including the underlying cost-benefit analysis.

Last but not least, Recommendation 22 is asking for ICANN to publish, monitor, and update the documentation on the organization and budget resources needed to manage SSR issues in conjunction with the introduction of the new gTLDs.

We have captured some budget numbers in our annual operating plan, and the details are listed here.

Xavier, if you want to talk about this a little bit and how we roll these numbers in to the operating plan, please do.

XAVIER CALVEZ:

Thank you, Negar. As Negar was indicating, the document here that's in front of you is a next track of our operating plan and budget. Though it's in small font on the screen, you may recognize on the left numbers that correspond to the strategic objectives and goals that we have reviewed a little bit earlier when we were discussing with Akram and the group here on the various goals in the KPIs. These are the same goals. As per [inaudible] strategy plan structure are five objectives and 16 goals, and then the portfolios are under them.

We produce our operating plan and budgets in accordance with that same structure. When we were reviewing with Akram the various portfolios and the KPIs that contain SSR-related activities, you then can look at those same portfolios and goals

and understand what resources are spent by the organization against those same portfolios, goals, and objectives.

As an illustration here, we see a table. Again, it's a next track from a much larger database of information that's similar. The first column lists the portfolios that make up a given goal. The first column provides FTE, which is Full-Time Equivalent. It simply means how many ICANN staff members contribute to this activity. The numbers are [inaudible] around because we may sometimes have 20% of a person or 50% of a person's time spent on that specific activity. Therefore, we aggregate together all the fractions of the various people who contribute to that activity. That may result in a decimal number.

The second column from the left corresponds to the amount of dollars spent on personnel activities, which simply corresponds to the fraction of full-time equivalent that is shown in the column on the left.

We have then the travel and meetings costs associated with this activity, the professional services spend, the administrative spend, as well as the capital spending. Usually, capital will be software [inaudible] possibly, or it could be equipment that is capitalized. That could be servers. That could be computers – this type of thing.

So you can see that information for every single portfolio of the entire strategy plan of ICANN. That captures 100% of ICANN's activities. Here we're simply showing those portfolios that pertain to the various objectives that contain SSR-related activities. So that information is just a few words to illustrate the process to collect that information.

What we ask the various departments of ICANN is to, when they produce their budget, break down the budget requirements that they have between the various categories of the columns that we've seen here – personnel versus travel and meeting versus professional services and so on – and that they break down that information by each of the portfolios.

When Susanna, for example – who's present here – looks at her personnel that report to her, she will then take every individual staff member and she will say, "What fraction of time of that individual is spent on which project and portfolio of this strategy plan?" Every department at ICANN does the same thing. We will then have that information for every department. We will aggregate it together, and then we will sort that information so that we can tell across the entirety of ICANN how many FTEs in this case are contributing to Portfolio 2.3.1, as an example, and across all the portfolios.

So we gather the information by department from the department managers, and then we aggregate it and sort it out by portfolio of the strategy plan, which lets us then produce the information that you see here. It's a very bottom-up, specific information produced by the managers of the activities that are carried out.

I'll stop here to see if there any questions on that information.

DENISE MICHEL:

James has a question, as do I. Are there any in the chat?

Go ahead, James.

JAMES GANNON:

Thanks. If we could go back to Slide 33, I think it was. Sorry – 34. Two quick questions. Global customer [support] – 15 FTEs. Are they registry/registrar facing? What is the scope of those FTEs? Because it seems like a very high amount.

XAVIER CALVEZ:

They're worldwide-facing. They're answering any request that come into ICANN relative to any questions. It could be about abuse. It could be about a contract. It could be about: where do I find this on the website? It's global and not restricted to a specific

part of ICANN or to specific types of parties. So it's all types of questions.

That team is distributed across several locations with the intent to cover all time zones.

JAMES GANNON: Okay. Thanks. I have two follow-ups if that's okay. Just to clarify, these are separate from registry/registrar-operations-focused teams, which exist under a separate –

XAVIER CALVEZ: Correct. That's true. The Global Support Team is basically hosted under the GDD operations, but they cover more than GDD in terms of the scope of their activities. The Registry and Registrar Engagement Teams are under a different group. Correct.

JAMES GANNON: I have one last follow up. It's unfortunate that I'm going to have to leave. There's 2.3 million for professional services for GDD. Given that the New gTLD Program is separate, what is that usually focused on?

XAVIER CALVEZ: Sorry. Can you tell me precisely where you're looking at the 2.3 million?

JAMES GANNON: [204].

XAVIER CALVEZ: I will need to come back to you with more details. I should but don't know the whole portfolio by heart. But I will provide the breakdown of that. So this is GDD operations. I don't want to make it up on the fly. I will come back to you with a more precise and comprehensive breakdown of that event. Thank you for that. I'll make a note of that. Thank you.

DENISE MICHEL: And we have one in the chat as well. Okay. Go ahead.

[YVETTE GUIGNEAUX]: In the chat room, James Gannon had made a clarification. I just need to read it in for the record, James. That's all. No problem. We're not calling you out. It's okay.

“Can GDD comment on the failures of both SLM and EBERO where they apply to the RSP failure scenarios? Also, implementation of EBERO. Testing took three years from implementation of the first ngTLD delegation. No security review of the EBERO has ever took place. What is the justification for that? I would also like to ask for Francisco to brief us on both systems from an SSR2 perspective

rather than an SSR1 implementation perspective.” We’re just reading those so we can get them in the record.

DENISE MICHEL:

Thank you. And that’s in line with similar questions that I had about those failures.

Xavier, the final implementation report for SSR1 still notes and incomplete next to the deliverable of identifying mechanisms that provide more detailed public information on SR-related budget expenditures across multiple ICANN departments. I understand that you’re providing breakdowns by portfolio. I think part of the challenge of security, stability, and resiliency-related activities is that some are quite obvious and holistic in terms of, say, OCTO, or SSR. Others are bits and pieces of various programs and departments.

Could you provide us more information as to why the mechanism objective remains incomplete and what activities are occurring to provide more holistic public information on SSR expenditures?

NEGAR FARZINNIA:

Denise, if you don’t mind, I think we have the answer to your question. The last part of these three recommendations were actually closed off in April of 2017, so fairly recently. If I promote the slides forward, we do have a template in place to actually

start reporting – it’s very hard to see in this slide. Apologies for that. This template has been published on our site. This template is what provides the detailed information as far as expenditure is concerned at a departmental level instead of a portfolio level, which helps breaks that information down.

We just prepared this template. It hasn’t been filled out yet. The plan is to start filling this out starting FY ‘18 and then on an ongoing annual basis to report on this as part of the response to this recommendation.

DENISE MICHEL: Thank you. Will you be issuing an updated final implementation report?

NEGAR FARZINNIA: Yeah. I will update the final implementation report to show completion for these recommendations. It just needs to be posted. It has been prepared.

DENISE MICHEL: Thank you. So that will be shortly.

NEGAR FARZINNIA: Yeah, absolutely.

DENISE MICHEL: Like a couple weeks.

NEGAR FARZINNIA: I would imagine it wouldn't take that long, but we'll definitely promise to have it up within the next two weeks.

DENISE MICHEL: Okay. It'll be great to look at this information. I know it's quite challenging, given the threat of SSR-related activities that run through all of ICANN.

At the same time, it's been almost six years since this recommendation was issued. Can you give us some more insight into why it took this long and how this is being prioritized, I guess, going forward?

XAVIER CALVEZ: Well, I think that why it took this long is reflective of how it's being prioritized as well in terms of resources. I think that the exercise of capturing correctly what SSR activities we all agree are to be included in this perspective has been relying on using this strategy plan effectively because I think the way we understood the recommendation was that it required us to put in place a

sustainable mechanism to identify and measure those activities on an ongoing basis.

So the strategy plan – I shouldn't tell that to you because you've done it when you were at ICANN – was finalized towards early FY '15, and the operating plan was developed to provide more depth in granularity for that strategy plan by developing the portfolios and projects underneath the strategy plan, which the strategy plan stopped at the goal level.

So we relied upon that structure of portfolios and projects that were underneath the objectives and goals. Then we started producing the information by identifying which of those goals or portfolios within the goals contained SSR-related activities, knowing that these portfolios or goals are not necessarily designed to be only all and only SSR activities. But of course, the OCTO thing, for example, helps us define the scope of those portfolios that fall under an SSR scope, though of course there's always a bit of a decision on the gray areas as to whether we include them or not include them. So it's not a perfect breakdown because the strategy plan was [managed to be] designed exclusively to capture just SSR activities and all of them and none of the other activities, which are of course designed to follow the operations of ICANN on an ongoing basis.

We have then used this structure of goals and portfolios with then the definition of what falls under SSSR and started producing that information with now the format that Negar has shown. We have simulated the calculation that this formats suggests with data of FY '16 and FY '17 in the previous months. So the template shows a design but we've already started filling in this template with draft data to be able to test the validity of it. So now we're going to be able to offer that view with numbers in it and be able to then offer that information to the community to this Review Team. Of course, I would expect most interested in it. And also be able to possibly help validating that this provides a useful information.

To your point, it's been like many other recommendations of the first SSR Review Team, long in the making also because in this case, it was more for the purpose of having a sustainable framework of analysis to be able to produce that on an ongoing basis. Now that we have the strategy plan, the goals, the portfolios, the projects and ongoing annual mechanisms to produce cost MFT information to do so, now we can produce something that we can back up that we can explain and that we can produce on a sustainable basis.

DENISE MICHEL: I have a follow up question. Can you give us a sense of what level of granularity will be contained in I guess the function column of this spreadsheet?

XAVIER CALVEZ: When you say function –

DENISE MICHEL: The dark blue on the left. It's entitled Function has direct SSR departments, direct shared resources. James.

XAVIER CALVEZ: You want to start –

DENISE MICHEL: Do you want to answer this?

JAMES GANNON: I'd like to get a follow up to get some context from my prospect, so I think it's the same question. Like are you going to be able to tag into our call centers or work breakdown structures or how deep down into the accounting piece can you go or does it need to stay at more of process level?

DENISE MICHEL: Do you need a more specific question? Okay.

XAVIER CALVEZ: Let me try to answer the question as to what this is showing and then by difference, we'll see if it addresses fully or not both of your questions because I think they're very similar. So the template that we've built and by the way, this is the model of producing that information that we also use in other circumstances like the CCWG, for example, or like the IANA Functions and the PTI, this is the same model that we're using.

So what we do is that we use a departmental information. What is the department? We have 60 or so departments at ICANN, some very small in terms of number of people and activities. Some larger, and we use the departmental information produced by the department manager.

I'll take a very selfish example. The finance department that I lead will, for the specific purpose of this template, determine how much of its headcount, therefore personnel costs, travel and meeting, professional services, admin and capital costs pertain to the specific portfolios and activities that are in the scope of this SSR report. So we are defining and you've seen that in the previous slides which goals, which portfolios contain SSR-related activities. And each department will say, "How many of their resources contribute to these specific portfolios that are in the

scope of SSR-related activities?” So I will look at all the personnel and the activities that we have and I will say, “There is two FTEs or 2-1/2 FTEs that contribute to those specific SSR activities. And that information will be contained for one department in one of the lines that appear on the templates.

We are simply breaking down the departments into two categories. You can see at the top, we have the direct costs for dedicated resources. We have direct costs for shared resources. So the first line dedicated resources, let me take an example. It will be – when we do this template for the IANA functions, it will be the IANA Department at ICANN that’s led by Elise Gerich, because that’s the department that’s entirely dedicated to these activities.

For SSR, this specific template, I can’t remember anymore the list of departments that appear under the dedicated resources. But I believe we have one or two, and I can’t remember there’s another department. I think that’s the only one. Then the shared resources will be departments that contribute to SSR activities on an ongoing basis but also to other types of activities.

Let me take an example that would illustrate the point. Our legal department, for example. May on an ongoing basis, provides support to review documents that are produced as part of the activity and will say, “We, for this specific SSR-related activity, we

dedicate maybe half FTE on an ongoing basis.” So that information will then be captured in a separate line of the lower end of the template and will appear in this section corresponding to shared resources.

The third line that you see at the template is only trying to capture the support services allocations. So what I mean by that is when ICANN has an employee, there is HR support. There is finance support. There is rent. There is overhead, just generalized. That’s what appears in the third line. So going back more specifically to both of your questions, the level of granularity of this template will be by department, by everyone of the 60 department of course. Not all 60 department contributes to SSR-related activity, but the list will contain those departments that have identified themselves as contributing to those activities, whether in the dedicated fashion or in a shared fashion or through allocations.

The granularity will contain the same breakdown of costs by personnel, travel and meetings professional services, and so on. We can also provide though this is not the purpose of the specific format, but we can also provide that information by the portfolios and goals that we’ve seen before. So that’s the level of information that’s [inaudible].

DENISE MICHEL: That's helpful. I have a follow up question. I think James does as well. And Alain. Yes, go ahead, James.

JAMES GANNON: Just on timing. I think we have a couple of follow ups on this. We still need to get to Kim.

DENISE MICHEL: Yeah.

JAMES GANNON: So can I suggest that we get some text together and send it to Xavier?

DENISE MICHEL: Karen, I'm assuming staff has taking a running list of the follow up questions that we need to provide.

KAREN MULBERRY: Yes. We're capturing ones that have been red into the record which is why it's important that they are.

DENISE MICHEL: So we're also counting on staff to follow the conversation on the note the ones that people are raising and noting that we have additional follow up questions.

KAREN MULBERRY: Yes, and we're trying to make sure that the red in the records are everyone's aware of what we're doing as well. I don't know what that means.

DENISE MICHEL: Alain.

ALAIN AINA: Yes. So I think part of this recommendation is about how do you monitor, how do you update and monitor these budgeting. The answer is [inaudible]. Also make sure that we do some cost and benefits analysis, make sure that we are spending the correct amount for a good result. Make sure that the SSR activities are well funded in them.

DENISE MICHEL: I think we lose Kim at noon as well, so we'll need to move onto that. So let's capture that as a follow up question. And I also have a follow up sort of question and comment. My understanding of the intention of the SSR1 recommendation on this was public

information on SSR expenditures. What I would be looking for is not how much departments are spending but rather how much you're spending on a barrel, for example, or the ITHI index.

This table strikes me as very inside ICANN and not a publicly facing useful summary of key SSR, you know, total expenditures. And so I'll crack that as a follow up question, but I want to share that before you leave because I know we need to turn this over to Kim.

UNIDENTIFIED MALE: Do you have also a follow up question? But just to make sure it's captured correctly. Okay. Thank you.

DENISE MICHEL: Thank you very much.

NEGAR FARZINNIA: All right. Thank you, everybody. So moving forward to certification, to address recommendation 9, I can show you the CIS certification options, we commonly accept that international standards for these operational responsibilities and for ICANN to publish a clear roadmap towards certification. This was addressed in two ways. The first one was the SysTrust

Certification that we achieved as part of implementation of DNSSEC in the root.

The second was pertaining to incorporating SSR-related certification objectives into the EFQM program that ICANN has rolled out. We'll start with the certification that IANA department does today and with that, I turn it over to you Kim.

KIM DAVIES:

Thanks, Negar. So within the IANA Function's team, we have two different audits the way complete on an annual basis. The first is SOC3 Certification for the roots and KSK system. And the other is SOC2 Certification, what we call the Registry, Assignment and Maintenance Systems. These are effectively the tools that we use the systems that we use day-to-day to deliver the IANA Functions.

But for these are done in the Service Organization Controls framework. You might have heard of that as SysTrust. We renamed a couple of years ago. But it's a well-established framework that's certified by the American Institute of Certified [Practicing] Accountants for assessing organization controls over security systems.

Next slide please. So as I mentioned, the Trust Service principles and criteria on these audits governed by the AICPA. And essentially the goal of this is to have outside parties observed, the

controls we have in place inside the organization governing how you operate a particular system.

The two systems I mentioned, the Root Zone, Key Signing Key, and the systems that we use in a day-to-day business. There's a variety of different principles that can be applicable to a particular organization. What we are conducting on an annual basis for us that we felt were particularly relevant [are those] of availability, processing, integrity and security. So these are the facets against which controls are written and controls are assessed as part of the audits. Next slide.

So the SOC3 Certification for the Root Zone KSK, for those that are unaware the Root Zone KSK is the trust anchor for the DNSSEC system. It's really important to us that there is community trust in how it is operated. It's really fundamental to DNSSEC itself that the trust anchor is maintained in appropriate fashion.

We feel that there is multi ways that a community acceptance of KSK management is found one of which is having these kind of third-party audits. We have other mechanisms as well such as trusted community representatives of which we've had couple in the room today. But this particular facet is having recognized the party [whether] the observed how we manage the KSK and assess us against the controls that have been designed for managing the KSK.

The particular audit has been done by PricewaterhouseCoopers and they've been performing the audits since 2010. 2010 is when we launched the KSK. So essentially what happened is PwC observes Key ceremonies. They obtained audit materials associated with the KSK. They review internal policies and procedures. They interview our staff and then they connect all these dots together produce an annual report that states that we followed the control environment has been defined for the KSK. Next slide.

So the other kind of audit that we do, the SOC2 audit pertains to our day-to-day management systems. These are systems that we rely upon to manage the Root Zone, manage the protocol parameter performance for the IETF and so forth. They're essentially audited for much the same kinds of criteria. But with the SOC2 audit, the goal is to provide detailed report that is useful for relevant oversight bodies to analyze how we're fulfilling those Trust criteria.

So on annual basis as well, the SOC2 audit is performed against Root Zone Management System and the other various systems. And we provide this to the IETF. We historically provided [NTIA] and to the five Regional Internet Registries. And we've conducted this SOC2 audit since 2013.

I think that was it. So that was just the [inaudible] tour of what we do with respect to SOC2 and SOC3 audits.

DENISE MICHEL: Thank you, Kim. That's very useful and as usual IANA's far ahead the rest of the organization in implementing these types of standard-based activities. I have Alain and then James.

ALAIN AINA: Yes. Thank you, Denise for pointing out that IANA Function and the ICANN. But what you just presented is more focused on the IANA part. So what about the ICANN [IT zone], is this going to be covered in the different presentation?

DENISE MICHEL: I think Alain, before you joined us in the room, there was a discussion to have a follow up presentation briefing with the CIO of ICANN who might be able to provide more information with regards to certification across the whole organization and internal systems.

James, go ahead please.

JAMES GANNON: Thanks [again, Kim]. And so whom the IETF do the SOC2 go to, the [IOAC] or -?

KIM DAVIES: I think it would be the IAB.

JAMES GANNON: IAB, okay. Thanks.

KIM DAVIES: I think it's worth noting the fundamental difference between the SOC3 and SOC2, SOC3 sort of certifies the whole system and so the pass-fail audit. SOC2 provides a fairly detailed assessment which is not appropriate for general public disclosure. So with SOC2 audit and we share it with representatives of the key [oversight] bodies of the IANA Functions.

ALAIN AINA: Thank you. Just quick clarification. Yes, it's definitely IAB but it has not included [inaudible]?

JAMES GANNON: Yes, Alain, just for some context. So this is SSR1 stuff when we [inaudible] SSR2, I think there's a question over why the TCRs don't have access to the SOC2, for example. So that's why I was just asking who in IETF [land get to]. But that's not for – no, that's for SSR2.

DENISE MICHEL: Members of the team who aren't fluent in IANA, could you unpack those couple of those acronyms you just used.

JAMES GANNON: Sorry. Yeah, so the trusted community representatives are the people from the community who sit in and provide the observation and then I would say oversight of the Root Zone Management piece. And when it comes to the KSK on this, and there is probably an ongoing discussion that we say over the last few years over why the TCRs as the community representatives don't get under NDA or appropriate controls access to the SOC2 report.

DENISE MICHEL: Are there questions for Kim regarding on IANA? Yes, Boban.

BOBAN KRSIC: Kim, just one question. Do you only have PwC to provide the audits or do you have another auditor?

KIM DAVIES: We've only had PwC conduct them today, I believe [inaudible] putting it out or if we haven't completed that process this year

soliciting new vendors. So it's not assured that it will be PwC moving forward.

DENISE MICHEL: Yes, James.

JAMES GANNON: Can I ask SSR2 follow up?

DENISE MICHEL: Sorry?

JAMES GANNON: Can I ask a follow up just from the point of view of SSR2?

DENISE MICHEL: Yes, please do.

JAMES GANNON: Kim, what's the plan from regards of the PTI [split now]? Will ICANN be contracting with an overture which will then do it on behalf of PTI or will PTI be doing it directly or how will that little [matrix] work?

KIM DAVIES: I have to be honest that's getting into the realm of contracting that doesn't cross my desk. So I'm not sure the exact relationship there whether PTI's contracting directly of ICANN. I just don't know.

DENISE MICHEL: Additional questions for Kim on IANA? Yeah, go ahead, Negar.

NEGAR FARZINNIA: All right. Moving on to the next last part of the presentation, I promise everybody in the room this is the last part of the presentation answering the EFQM model that ICANN has employed. With that, Susanna, I turn it over to you please.

SUSANNA BENNETT: We're running out of time so very quickly. I'll incite Denise said that IANA Function has been doing a lot of work on improvements and the department had implemented that the EFQM Excellence Model and being [through] an audit by an external party and achieved the EFQM commitment to excellence recognition. A couple of years ago, the whole organization also apply the EFQM model and assess internally how we are doing organization-wide and we're in the midst of conducting the third annual internal assessment. Next slide please.

Many of you may be familiar with this model. This is really a framework driving the improvement or continuous improvement of organization. And it's really Excellence Model if you haven't seen it before. It's on [inaudible] take a look at. And it has many categories but the focus definitely is organization-wide including leadership and strategy and people and whatnot, and focusing on how we can continue to improve as a total organization.

DENISE MICHEL:

Susanna, how's your schedule? Can you spare few more minutes? Okay. Thank you. Can you give us a brief overview or sense of how the FY '15 EFQM assessment what the results were?

SUSANNA BENNETT:

We started at FY '15 and it was started with not with every detailed areas and we did a shallow one to really learn from the process. Marilia and Leo – Marilia is in charge of this program with IANA and Leo was the one that started this with the IANA implementation. So they both on the '14. We learned a lot and the second year of FY '16, we went deeper and touched every department in the organization.

And this FY '17 process, instead of more bottom-up approach, we decided to do a more top-down looking at the total organization from more the strategic level. And sharing of this information, we

are reviewing at one point when we have the FY '17 result done, we share with the organization and within Executive team and the Board of course. We have assessed the timing of sharing that with whole community.

DENISE MICHEL: Just a follow up question. So you're doing the EFQM assessment every year and what you're assessing and how you're assessing it changes from year to year to sort of meet the organization's needs. Is that your –

SUSANNA BENNETT: No, we have been conducting the total organization review since FY '15, the second half of FY '15. As I said, it's the first time for us to do it and we had quite a bit of learning to do. So we approached it with a more shallow approach instead to get deeper into the whole details of every department. We did a shallow approach. Then the second year, taking the learning from the first year, we went deeper with every department and a lot of details.

Then, FY '17 we looked at the result of the FY '16 review. It's a bit of the trees in the forest. We wanted to make sure that we see the forest better since we have the detailed information from FY '16. So this year FY '17, we approached it on the more of the forest

approach looking at the whole organization from that perspective and conducting with the detail.

Because it's more strategically focused, we felt that it's a good balance from the previous years' approach and we feel that we will have improvement thoughts from that assessment to share more at the Board level and also the community level. Thank you.

DENISE MICHEL: So the follow up question, so starting in FY '15, you have done EFQM every year with different approaches each year so far.

SUSANNA BENNETT: I would say more improved approach every year.

DENISE MICHEL: With improved approaches every year. And is the plan to continue this each year? And do you publish the results of the assessment on the EFQM webpage?

SUSANNA BENNETT: We have not published because we're still learning. And to answer your first question, yes. Each year, we're going to do this and the goal for us is to also obtain a third-party external review. We hoped to achieve that by FY '19 the way that IANA achieved it in 2013. And we are considering publishing the FY '17 result. Since

we're still in the midst of it, we wanted to make sure we do a good job and also obtain the review of the organization Executives and the Board. And then we look at how we communicate and share that with the community.

DENISE MICHEL: Thank you. Are there additional questions and how's the chat room? Alain.

ALAIN AINA: Kim. You have a section or discussion with the bodies you shared. You said the SOC2 report, the part of the process that when you get the SOC2 report, you share with IETF, you share with the RIR. Do you have a process engaging them and getting feedback or you just send them off just sharing the report. Or do you have a process?

KIM DAVIES: So the process of sharing the SOC2 results, I think is an evolving process prior to the IANA transition, the primary custom of that report was NTIA. Now, as new oversight bodies are coming onboard and the new IANA transition arrangements are in place, I think the key parties receiving and now sort of the leadership of the IETF and leadership of the RIRs. Specifically because in the governing agreements we have with them, that actually speaks to

one thing. But what the mechanisms are I think is evolving, particularly because the transition is still relatively new.

DENISE MICHEL:

I have I guess a final question. Susanne, can you give us some insight into the thought process behind not releasing the previous EFQM assessments to the public, sort of in the interest of transparency, allowing the public to learn about ICANN's EFQM activities along with the staff? And is that something that would be considered to be done?

SUSANNA BENNETT:

Like I said earlier, FY '15 was our first year, and we had quite a bit to learn. So, we wanted to make sure that the internal assessment has matured to a level that we're doing the right thing in our assessment. So, that's why we feel that we need to learn more from it each year. So, FY '17, at this point we feel pretty good so we hope to with result of review with Executives and the Board that we will have a good approach to share with the community, but also to obtain input from the community, not just say, "This is how we assess it, this is the result." We really wanted to get a good dialog with the community and learn from the community. So, we want to prepare good enough to do that. That's why the first year that was such a learning process. It was not at a point that we feel it's adequate enough to share.

DENISE MICHEL: Is the intention then to – I guess starting with this FY '17 EFQM assessment that you will be releasing to the public, will you then have a process that you repeat each year of doing an EFQM, of releasing it to the public? I think that's my question.

SUSANNA BENNETT: That's definitely the plan. Thank you.

DENISE MICHEL: Negar? And are there any other questions from team members? We have a chat question? Okay. Negar will go to the chat room first and then –

UNIDENTIFIED FEMALE: We have a question from Mr. Matogoro. "What were the main criterial/factor that were used to select a specific certification standards? Especially those presented on this recommendation."

DENISE MICHEL: Matogoro, is that for both IANA and the [broad] operation? Why don't we answer both questions? I think you're using separate standards, you're using an EFQM approach, and then you have –

UNIDENTIFIED FEMALE: He did say yes.

DENISE MICHEL: Yes, so he wants to know about the reasoning behind the standard and approaches you've selected.

KIM DAVIES: So, the first ordered activity we did was what's now called a SOC3. In 2010, it was called a SysTrust audit. I think that was the standard for likeminded sort of cryptographic certifications, so we were following best practice in that regard.

We began the SOC2 audit around 2012 as a consequence of the IANA contract that came in to force around that time, which required manual audit of our systems. SOC2 is, again, well respected mechanism of doing that.

I'm not familiar with the exact range of options [that were] presented in that respect, but it was presented to [NTIA] at the time, and this is what we proposed to do as part of our response to the [NTIA] call for – I'm failing the exact terminology of the ICANN's proposal to operate the IANA functions, we proposed that we do the SOC2 audit, and that was accepted as part of our proposal.

DENISE MICHEL: Thank you. Susanna, can you give us some insight into the selection of EFQM? And then we've got a question from James after that. Thanks.

SUSANNA BENNETT: Yes. IANA department chose EFQM several years ago, actually starting 2009. When we started looking at a model to apply for the organization, we decided EFQM is a better model. The reason is that it's a more global model, it's not U.S.-centric like many other models, and also it's well recognized by our community because of IANA's review and other reasons.

And by looking at the model itself, it's very a holistic approach. Instead of more suited for only for-profit companies, this is more applicable to for-profit and nonprofit organizations. So, these are the key reasons that we continued to use EFQM. Thank you.

DENISE MICHEL: Thank you. James?

JAMES GANNON: Thank you. Just for some I suppose confidence from Mr. Matogoro, I don't think for key management facility, there's anything [exact] SOC standard audit. That's the global standard for anybody who runs KMF. That's the only one that's really

tailored to that type of operation around cryptographic services and everything else.

DENISE MICHEL: Are we clear in the chat in terms of questions?

UNIDENTIFIED FEMALE: [inaudible]. We are. The only thing Mr. Matogoro asks, if you could speak close to the microphone. He's having a little bit of difficulty hearing us. So, he just asks that we [inaudible].

DENISE MICHEL: Negar?

NEGAR FARZINNIA: I just wanted to close the loop on an open item we had a few minutes ago regarding the final report for SSR1 implementation. I did confirm that the final report in fact was posted back in April. I will make sure the team sends out the link to the wiki page where the final report closes all the recommendations to the review team, so everybody has access to it.

DENISE MICHEL: Are there no further questions? Thank you very much, Kim and Susanna, and especially thank you for sitting through all the

previous recommendations discussions that you weren't a part of. I appreciate your time.

NEGAR FARZINNIA: And thank you all for all your time this morning. I know your schedule is tight. I appreciate everyone's time to let us go through these briefings. Thanks.

DENISE MICHEL: Okay. Thanks again. Go ahead. Did you have something? You looked like you wanted to talk. Alright. We're due for a lunch break, and thank you all for bearing with us skipping a morning break and plowing through this material. We're due back at 1:15? Okay. We're due back here at 1:15. And lunch is outside.

UNIDENTIFIED FEMALE: Just to let everybody know –

DENISE MICHEL: Thank you. And for Geoff and Matogoro, we're taking a one-hour break and then we'll reconvene.

JAMES GANNON: Can we leave our laptops [inaudible] So, we can leave our stuff here? Okay.

[BREAK]

DENISE MICHEL:

We'll get started again. Do we have Matogoro and Geoff in the chat yet? Okay. Hello, Mr. Matogoro.

Before we dive back into the subtopics, I thought it would be useful to just review the questions or categories of questions that arose from the last couple of hours, so we can make sure that we capture those and help staff to facilitate pulling together all the questions we want to send to staff this morning.

Jennifer has sent around a link to a Google Doc that sets out the category of questions, so if you can – they'll pull that up on the slide deck. But also take a look at the e-mail list and click on that link, if you will. So, I have it in my SSR inbox. Anyone else have the link, or anyone doesn't have the link?

We'll be projecting it as well. Alright, so the category of questions from this morning for staff, I think the grouping is we noted that we'll have follow-up questions relating to IDNs, follow-up questions relating to the New gTLD Program, questions relating to GDD technical services, questions relating to SSR-related budget and expenditures, and a follow-up certification question.

Other categories or questions that any of you have? Noorul, did you?

NOORUL AMEEN: In the last meeting, I put some suggestions for IDN WHOIS database, because we are facing some challenges before WHOIS database lookup for IDN domains. So, last time, [CTO] promised that they will share the WHOIS database with us.

DENISE MICHEL: Great. Thank you.

NOORUL AMEEN: So that also we could [add as an addition].

DENISE MICHEL: That would be great to add. Would you mind just hopping on that Google Doc, clicking in the link that Jennifer provided, and just drop that question in under the IDN section? That would be great.

And thank you, Jennifer, for this list. I know you created these on the fly, so please take some time later to look at these. Feel free to edit the Google Doc, add additional questions. We'd like to have a at least – and of course, we can ask staff questions any time, but I'd like to by close of business tomorrow here have this

list finalized for the follow-up questions from this morning's presentations. James.

JAMES GANNON: Sorry, just a quick question. Jennifer, can you change that to a commentable shared link? At the moment, it's... Thank you.

DENISE MICHEL: Because it's a publicly shared link, she then needs to go back in and give just team members rights to edit and add questions.

Welcome, Ram. Glad to have you here.

So, Noorul had an IDN question. I know James and I have a little more detail probably on the EBERO questions. And if you could change, Jennifer, the certification grouping to maybe certification and standards, and that'll allow us to capture some follow-up questions relating to EFQM. Okay.

Great, so and an action item for the team is by close of business tomorrow, if we could finish this particular Google Doc for questions that came out of this morning's session with staff, then we'll turn it over to staff to send to the relevant staff. And if you could make sure if just on the line- actually, I think it would be useful to just send - I'll send a note to the list so people who are not at the meeting can also review the slides and participate.

Again, we have of course the ability to ask staff questions at any time, but it would be useful while this is all fresh in our minds to make sure that we capture the questions from this morning's session. Any other questions or issues that people would like to add? No? James, is that an old one, a new one? Steve.

STEVE CONTE: Hi, thanks. Just as a clarification question for these questions, these questions, can we make the assumption or can we make it explicit that these questions are geared towards ICANN's perspective? And I'll bring up one in particular, "What metric has been used to ensure a healthy DNS marketplace?" I think different entities might have a different answer for that, so I'm presuming that something like this is geared toward what's ICANN's perspective of the metric for the healthy DNS marketplace.

DENISE MICHEL: Yes.

STEVE CONTE: But if we could just make that specific, please.

DENISE MICHEL: Yes, thank you. And again, it's incumbent on team members to go in, and this is a very rough sort of strawman that Jennifer kindly

started for us, but it's our responsibility to shape the questions to make them specific and reflective of what our specific questions were.

Yes, thank you. Alright. Cathy.

CATHY HANDLEY:

Thank you. I have sort of a killer question. Now that we spent all morning on having people explain where they are on the SSR1, where are we on the SSR1? I know there are some questions to be answered, but is it going to involve more briefings? Are we to a point that the SSR1 Subgroup can start writing or addressing the issues? Thank you.

DENISE MICHEL:

Thank you, Cathy. Great question. So, Negar, how many recommendations do we have left to get briefings on?

NEGAR FARZINNIA:

Other than the four that I believe no briefings were required on, we have five more recommendations left. Three of them are connected together, so they will definitely be done in one briefing. One is pertaining to compliance, and two are something that OCTO will help us prepare a briefing for. And GDD, of course.

DENISE MICHEL: Okay. Cathy?

CATHY HANDLEY: Thank you, Negar. So, we have no more briefing planned in these two days on SSR. We have one day in Abu Dhabi to meet. What is the plan on how those briefings are going to be handled, and when they're going to be handled? I'm trying to get at [the fact], we have got to get something done. As I said earlier, we've been rearranging deck chairs for like three months, and we really need to get something done. And it seems like we're close on the SSR1 review, and hopefully, we will quit kind of dragging it out and just get it done. Thank you.

DENISE MICHEL: Yes. Thanks, Cathy. It's unclear why staff wasn't able to give us access to more briefings in May and June, because the plan coming out of Madrid, of course, was to address on each conference call at least one topic to get the reviews done by Johannesburg. That was the continual request of the co-Chairs over the last several months, and it's unclear why that hasn't happened. And we'd really prefer that we not wait until after July 25th to have any additional briefings. It would be really ideal if for the next few Tuesday conference calls, we could wrap up most – if not all – of the briefings. Is that something you could redouble your efforts to try and make happen?

NEGAR FARZINNIA:

I certainly appreciate the need for these briefings. We are pulling a lot of different material together to make sure the briefings are addressing what was done and meet the needs of the team. Part of the effort involves availability of the staff. It's not a matter of unwillingness of the staff to do this, it's a matter of availability.

For some of the remaining recommendations, we still need a couple of our executives to participate, and they have other engagements, unfortunately, that might impact the schedule, but we are doing our best to pull these briefings in and schedule them as quickly as we possibly can in coordination with the Review Team to deliver everything to you.

CATHY HANDLEY:

Thank you. But I'm going to be real clear: this isn't an issue about who didn't get what done. We really don't have time to have any more discussions about who didn't do what, and I honestly don't care. We have briefings, we have to get finished. We have one item on our list that we have to do. That's the SSR1 review, and we are dependent on you and the other people, and I find it hard to – I've been in business a long time, longer than I care to tell. However, if – what are you shaking your head for?

UNIDENTIFIED MALE: Because I know the feeling.

CATHY HANDLEY: We want some dates. We have conference calls every Tuesday from now until Lord knows when. I cannot believe somebody can't give us a commitment that on Tuesday the 18th they can be there to give the review. And if not, given that what we got back from the Board is questioning a little bit of how much we've gotten done, I've got no problem of writing that we are having trouble getting stuff that we need. So, I think you need to think long and hard about how to do that. Sorry, I'm not yelling at you.

NEGAR FARZINNIA: No, I haven't taken it as such. But just a note is that the Google Doc that was created to go over the schedule for the briefings, for the items that we've covered, we had solid dates on. For the remaining of the items, we've committed to providing a schedule by July 7th, which is the week right after Johannesburg. And the reason for that is because everyone is traveling, so it's going to be hard to catch up with staff and determine availability. But we will be providing staff availability for the remaining briefings by July 7th. I think it's end of next week, if I'm not mistaken.

CATHY HANDLEY: Yes, but just to clarify – and you also recently told the co-Chairs that no additional briefings could occur until after July 25th. Is that correct?

NEGAR FARZINNIA: What we had surmised from everyone’s schedule to date is – again because we need some of the executives for these briefings, for the remaining briefings, unfortunately they have other trips scheduled right after Johannesburg, and they’re going to be out of pocket, hence the need for July 25th I believe being the first availability.

UNIDENTIFIED FEMALE: James?

JAMES GANNON: Okay, so I’m going to make this a little bit more political at this point. Probably makes your life a little harder. And this is an issue of prioritization. We are being obviously put at a low priority. If that is the case, we need to write potentially to the Board, or we need to write to Göran and raise the priority of this. This is Bylaws-mandated review, this is not something that drops down the list of priorities for executive staff members. This should be up near the top.

DENISE MICHEL: Thank you, James. Kaveh?

KAVEH RANJBAR: As a general comment, I think if SSR2 wants to have any interaction like that, the right path is through the Board. If there are any traction [items.]

DENISE MICHEL: So, the larger context for this is we've had standing requests for these presentations for four months. So, it's a bit difficult to believe that over a four-month period, staff is not available. So, it's hard to come to any other conclusion than priorities. And we're not prioritizing the Security Review Team. In addition to that, according to the ICANN staff's own process and commitments when it comes to all review teams, not just ours, is that the implementation final report will be completed before the Review Team starts, and that all of the information relating to the implementation and assessment of the first Review Team will be completed and provided at the beginning of the review.

I would also point out that the security review was delayed for several months, almost a year. So, it's a difficult situation that the team is placed in, and it's difficult to understand why staff does

not have this information ready and we haven't provided it. I think we beat this into the ground, but –

NEGAR FARZINNIA: Yes, if I may, so again, I do appreciate the request. The first the review team met was in Copenhagen, in March. At the time, we had a number of recommendations, I believe five or six recommendations that were still open, very near completion.

DENISE MICHEL: We don't need to review the past.

NEGAR FARZINNIA: No, I understand.

DENISE MICHEL: But if there's any additional information you have about reviews going forward –

NEGAR FARZINNIA: I would like to address that, because it's rolling into lack of briefings being prepared, and I wanted to note that the recommendations at last were finalized in April. The final report was published in April. In March when we met in Copenhagen, we did provide a briefing to the team in terms of, "These are the

recommendations we have open and we're working on." So, as soon as they were closed, early April everything was posted. Even the final report was posted at that point. I've sent a link to Jennifer to share with the Review Team so you all can see the final report and the status of all the recommendations and their closure.

Next time that we met was in –

DENISE MICHEL:

Negar, we really don't need to take time to recount historically what has happened. So, I'm going to ask you to stop at this point. If you'd like to revisit all that history on the e-mail list, please feel free. If there's anything that you can do to get the remaining briefings, working with us to be scheduled earlier than August, that would be great. If there's anything additional that we need to do –

NEGAR FARZINNIA:

We'll do our best.

DENISE MICHEL:

Do let us know so we can close out this part of the review. Alright?

NEGAR FARZINNIA:

We'll definitely do our best.

DENISE MICHEL:

Great. Thank you. Onward. Is there anything in the chat room we need to be aware of? Thanks. Are there any notes from this morning's session from observers that we need to be made aware of at this point? Great. Okay.

So, if you could pull up the subtopics. I think – okay. So, this morning we were just noting the various groupings, so we'll finish running through that and then go back to the first one and do a sort of full team deduplication. Does anyone have a better word for that? Is it only me that it bothers? Okay.

We're on subtopic three. We had noted this morning that there are several items that need to be resolved and several connections with the ICANN security and potential duplicates there. In the DNS Security Team, we have a substantial number of team members listed there, so it's great to have lots of volunteers.

The subtopic three on DNS security is relating to ICANN's role in the broader security in the DNS and unique identifier system, including mitigating threats to the DNS and other unique identifiers. I think the biggest challenge in duplication will be between probably subtopic two and three, ICANN security and DNS security.

Subtopic four is future threats. This is the discrete set of questions that were reflected in our initial brainstorming session that had to do with ICANN’s long-term strategy and plan for mitigating potential threats and improving SSR. And then topic five is the IANA transition impact, which is the one we have a rapporteur for. I think James had volunteered to be the rapporteur for the IANA transition. It’s our other subtopic group that is I think more well-defined than some of the others. It’s pretty clear what will be reviewed there.

And then finally, we have an “Other” category, which I think was intended for orphan topics. I think that has more to do with the team’s processes and how we’re addressing this. Indicators SSR2 would want to use to measure success of security efforts, collecting input from the community, reflecting on the effectiveness of coordination with the [IETF] effort.

I think – and then we have some orphan topics at the end that we should either get rid of or incorporate into one of the other topic areas. Personally, I don’t see a need to have another topic. I think we can fit them into the other four existing, and then have some sort of meta guidance for some of the methodologies we want to use in doing our work, and we can reflect those outside of the subtopic areas.

Let's go back up to subtopic one. We have Alain, Ram, Krishna and Eric and myself in this subtopic area. We still need a rapporteur for it. I think the action item here under – and welcome volunteers – and we'll be drawing straws if we don't have rapporteurs by the end of the day tomorrow. Take a quick look either on the screen, or if you've got – these are in the Google Doc as well.

Are there any specific work items that are noted here that people have concerns about, view as duplications, or sort of connections to other subtopic items? We have completing the assessment, which is an obvious work thread in here, and then some specific questions about the recommendations themselves, and a suggestion of defining a set of metrics to measure the effectiveness of implementation.

I think a practical next step for this subtopic will be to list out the specific recommendations, flag ones that have connections to other subtopics, and list the particular next steps and tasks that can help seed a work plan on how we want to finish up the assessment, and then propose some general metrics or measurements on effectiveness of the recommendations for review by the full Review Team.

Do we have any other questions, concerned issues, things people want to talk about relating to subtopic one? James?

JAMES GANNON: Thanks. I suppose this is more of a process question. To date, we've got all of the briefings to the plenary on the SSR1 implementation. At what point do we want to move that work, and then the writing of the actual piece for our report down to the subgroup?

DENISE MICHEL: Yes. And again, these aren't questions that the Chairs are going to unilaterally answer and impose on the team. This is something that collectively, we all need to be comfortable with the process we're going to use for these. If you're asking me, personally I think the full team should complete presentations on all the recommendations, but for those that we've already received recommendations for and we have the implementation, I would suggest personally that we move those to the subteam level, have the subteam identify follow-up questions, any missing information, any additional research that needs to be done, and a suggested timeline for how that work should roll out. And then starting to fill out – and again, and addressing the metrics and assessment question that – for the team's consideration, and then start to fill out sort of key points that the subteam has for each of the recommendations that can ultimately go into our report on this section. Personally, that's how I see the work. [inaudible], go ahead.

JAMES GANNON: Yes. Would I be out of line in saying then that that's something that can start now for the ones that we've received the briefing on? So that that subteam can start.

DENISE MICHEL: Yes. Personally, I think for the recommendations where we received the briefings and we feel that we have the bulk of the information, that work can start.

JAMES GANNON: I'm going to be very cheeky. Can I suggest that Denise is nominated as the rapporteur for Subteam 1?

DENISE MICHEL: I'm exercising my great authority as Chair to say, "Hell no." We're kept pretty busy as co-Chairs, and I wouldn't want to hog the mic, so to speak, on talking for groups and to the team. So, my preference would be that someone else be the rapporteur. Let's see how that plays out. But thank you. Okay. Chat room?

UNIDENTIFIED FEMALE: Geoff Huston has a few comments in the chat on SSR1 in regards to the work items. He stated that #1 and #6 seem like they overlap. Numbers 4, 5 and 9 seem to say the same thing. Number

3 is kind of fuzzy, and Item #8 appears to transcend SSR1 and is probably Work Item #4. Do you guys want me to repeat those one more time?

DENISE MICHEL: No.

UNIDENTIFIED FEMALE: You guys go it?

DENISE MICHEL: I got it.

UNIDENTIFIED FEMALE: Okay.

DENISE MICHEL: And he thought that 8 rolls into 4?

UNIDENTIFIED FEMALE: Yes, he said – yes, “And Item #8 appears to transcend SSR1 and is probably Work Item #4.” Hang on, “I meant to say subtopic 4.” So, Geoff has just corrected that.

DENISE MICHEL: Yes, I was going to say it. I think it –

UNIDENTIFIED FEMALE: He meant to say [inaudible]

DENISE MICHEL: Yes, I would agree it probably fits better in another subtopic area. I would think though it fits within ICANN security, which is subtopic two. Geoff, it would be good to hear your thinking. So, I would think ICANN security because compliance rests solely within ICANN's responsibility. But go ahead.

UNIDENTIFIED FEMALE: Geoff did reply. He said he's happy with 2 or 4.

DENISE MICHEL: Okay.

UNIDENTIFIED FEMALE: So, it being subtopic 2 or 4.

DENISE MICHEL: Thank you, Geoff. For me, that raises I think a larger question of how we draw the line between ICANN security and DNS security. They have several items in here that can be closely related. So, we

have ICANN security as the ICANN – relating to ICANN’s effectiveness of both its internal security processes and the ICANN security framework.

ICANN security framework is quite broad and detailed, includes a range of activities that occur within ICANN, but many of those activities also involve coordinating with other entities outside of ICANN, so it gets it into DNS security. Any thoughts on bringing more clarity to how we distinguish between these two areas?

CATHY HANDLEY:

Yes, I think we really haven’t had a chance to sit down and talk as a subgroup on the topics that are there. These were topics that were left from the original boarding of some that clearly would be better placed under the ICANN security. I think before we go through this, I think it would be good for the subteam to sit down and go through them, and maybe get an understanding from folks as to why they’re there.

I can look at some stuff like CGNs, and that has – it’s totally under the purview of the operator. So, there’s really nothing that would be done as far as in ICANN security. So, I think once we go through them like through the rest of them that don’t, that’ll make a difference.

DENISE MICHEL: Thank you, Cathy. That's helpful. And I would also though remind people that – and the subgroup can do this as well – some of these brainstorming items that are reflected here were added to the list by members because they wanted to understand the broader context in which an ICANN responsibility was occurring, to understand the connection to the broader sort of ecosystem if you will, and then bring it back to how that related specifically to ICANN's mission. So, I think it would be helpful to flesh those out when you come across items that seem to broad to add a little more context there about what you think the team needs to understand, and within that, what is ICANN's specific mission related to that topic.

Was there another comment on this side? Oh, Don.

DON BLUMENTHAL: I think what Cathy just said really highlights the importance of us getting together in a phone call, or depending on how many of us are here, and examining the different elements of each group. As an example, CGN does raise some abuse issues, and I even know that John Crain's group has looked at that. So, the Public Safety Working Group. So, we really need to brainstorm.

DENISE MICHEL: So, I think there's a question for the team at hand. We've got a couple of hours now. Do you find that it would be – we have enough people to break up into some smaller subtopic groups and go through these more specifically. I think it's just a matter of whether you feel it would be more productive to go through all the items, the work items as a team, or go through them in smaller groups and then come back to the full team. What do you think would be most useful at this point in terms of how you prefer to work? Don?

DON BLUMENTHAL: I'll double back on what I said this morning. I think the groups meeting and then coming back and reporting probably would work better.

DENISE MICHEL: Other thoughts? Yes. Hey, Karen, you sent – you may have just sent it to the co-Chairs, I'm not sure, but we have a list of the subtopics and the members who are here in person. Can you bring that up? Do you know which one I'm talking about? Yes, you sent it last week. Okay, she'll bring it up. Then I think this room is big enough to just congregate into smaller groups. Yes, Steve.

STEVE CONTE: Just a logistical question. You have two members online, and their only access to audio is through the mics, so just if you haven't thought about that already, one group – or whoever chooses, hopefully both team members online will choose the same group, and then that subgroup will have control of the mics.

DENISE MICHEL: We can certainly keep access to the Adobe room, and you can include Geoff and Matogoro definitely as through the chat, and hopefully the mics will work as well since we're just going to I think use this room for breakup discussions. Yes. Okay.

So, we have some overlap on the teams. So, I think we just need to make sure we have at least two people in each group, and I'll leave it to the team members to choose which one they want to support and engage with this afternoon. James.

JAMES GANNON: Just for the record, we've lost Mr. Matogoro, so we're down to just Geoff remote.

DENISE MICHEL: Okay. Hey, Geoff, which subtopic do you want to address as we break out into smaller groups? DNS security? Okay. Thank you.

Here we go. So, the ones in red would be us. So, there's Cathy, James and Geoff – well, there's Cathy – so, let me just propose this. Tell me if you guys would like to do something different. So, we have Cathy and James addressing IANA, and then Geoff... Emily is not here. Geoff addressing DNS security along with Alain, Zarko – I mean Alain and Don. You need to remove Emily and Eric [inaudible]. And then we have ICANN security with Boban and Zarko. And then I'm left with SSR1. And Alain, which group did you want to do? You run several as well. Okay, so Alain and I will do SSR1.

UNIDENTIFIED FEMALE: Noorul is here as well. Noorul Ameen, so he's not in red up there. Sorry about that. And also, Ram. Yes.

DENISE MICHEL: Great. Noorul and Ram, which groups would you like to do?

UNIDENTIFIED MALE: [inaudible]

DENISE MICHEL: Okay. Great, so SSR1 up here with me, and ICANN security with Ram at that end. DNS security at that end, and IANA transition up here. We have future threats as well. Noorul, did you want to?

NOORUL AMEEN: Future Threats?

DENISE MICHEL: Yes, did you want to address future threats? Boban? Yes.

BOBAN KRISC: I propose – we’re only a few people here. Maybe it’s better to focus only on two subtopics, and we’re in broader group. You have more than two people, maybe with three or four people. And I would propose to focus on two and three.

DENISE MICHEL: Yes, the ones where there’s the most duplication.

BOBAN KRISC: Because SSR1 – yes, it’s [cleaner.]

DENISE MICHEL: It’s pretty straight forward, I think. Yes, and IANA is as well.

BOBAN KRISC: And IANA transition as well. Yes.

DENISE MICHEL: James, would you feel comfortable?

JAMES GANNON: We were actually thinking that if we had a few hours, maybe an hour or two now, we could actually make serious progress with the tools now on IANA. I think there's nothing stopping you from the rest of the team going off and doing that, but myself and Cathy have pretty clear ideas of what we need to do. So, a couple hours now could actually get us significantly complete.

DENISE MICHEL: Alright. I'm happy to see on SSR1 and work on that separately. So, that will leave ICANN security over here, DNS security over here. So, let's make that happen. And DNS security, remember you've got Geoff online assisting you. It would be great to have a rapporteur as well coming out of those groups. And again, our to-do items – and please, if you see additional ones, throw those in. We want to make sure we remove duplication, make sure that the work items are as complete as we can make them. Flag issues that are strongly connected to another subtopic or you think should be moved. Clarify the work items that are fairly vague or need more work.

If there's agreement within the tea members of higher priority items, it would be great to flag those as well. If it's obvious where

there are some clear next steps like additional information gathering, research, doing specific outreach, flag that as well. And we'll give ourselves the next hour. We'll give you an hour, check where work is, see how you guys are feeling about it, and then take it from there. Sound good? So, let's report back at 3:00.

[BREAK]

DENISE MICHEL: Okay, move people. We have ICANN security over here, DNS security over there.

JAMES GANNON: Sorry, just so I mention it to the Tech staff, they're going to organize – whichever group Geoff is on, they'll be able to keep that mic live and recording but that the rest of the room won't have to hear the conversations within that group so they can turn off. Yes.

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: When you guys speaks, just go ahead and click that –

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: Yes, I can do that. You can go ahead and see that. We just need to speak in the mic so he can hear you.

UNIDENTIFIED MALE: Okay. Yes. Can we have the subtopic document and [inaudible]

UNIDENTIFIED FEMALE: Getting that right now.

UNIDENTIFIED MALE: I can barely hear you. [inaudible]

UNIDENTIFIED MALE: Hello?

UNIDENTIFIED FEMALE: Yes, he can hear you. [Confirmed.]

UNIDENTIFIED MALE: Hello?

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: You won't hear him, but he can hear you.

UNIDENTIFIED MALE: Okay. So, can we have this slide to the page on the DNS security?

UNIDENTIFIED FEMALE: Yes, [inaudible]

UNIDENTIFIED MALE: Yes, [inaudible] We are fixing the DNS.

UNIDENTIFIED FEMALE: [There we go.]

UNIDENTIFIED MALE: Okay.

UNIDENTIFIED FEMALE: It's on screen.

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: DNS security.

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: [inaudible] we talk just so Geoff can hear you. [inaudible] speak in the mic.

UNIDENTIFIED MALE: [inaudible]

STEVE CONTE: Geoff, this is Steve, I'm just kind of lurking between this subgroup and the internal security subgroup, just so you know.

UNIDENTIFIED FEMALE: [inaudible]

UNIDENTIFIED MALE: Okay, so –

UNIDENTIFIED FEMALE: Go ahead.

UNIDENTIFIED MALE: Okay. [inaudible] What I suggest is I think we review this document and see if we maybe each section of the document, and make sure we agree, or if we can update the document and if there are topics there or work items there we want to rephrase, we want to change and see if we agree, we can at the end agree on the document, especially on the work item, and maybe after this, look at if we can agree on the rapporteur. Do we have to select the rapporteur right now, or we can do that on the mailing list?

ŽARKO KECIĆ: I would prefer to do it right now, and I already mentioned that I'm proposing Geoff to be –

UNIDENTIFIED MALE: Be the rapporteur. Okay. So, Geoff, are you okay being the rapporteur?

UNIDENTIFIED FEMALE: [inaudible]

UNIDENTIFIED MALE: Geoff? There is a proposal here, there is a proposal from Zarko that you be the rapporteur.

UNIDENTIFIED FEMALE: He says yes, he can do that.

UNIDENTIFIED MALE: Okay, great. Okay, so in this case, but we can't hear the rapporteur, I want to turn to the rapporteur but we can't hear the rapporteur. So, maybe I [proceed for] the rapporteur.

UNIDENTIFIED FEMALE: We need to have a rapporteur, he's going to be a typing rapporteur.

UNIDENTIFIED MALE: Okay, good, so we have a rapporteur.

UNIDENTIFIED FEMALE: We do.

UNIDENTIFIED MALE: We have a rapporteur. Good.

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: No, we don't have a phone bridge out for him for this, because [inaudible] But we don't. Otherwise, I would definitely. Wait a minute, I have another idea. Let's [inaudible] the chat. He said he heard all of this. You just need to – I'll follow the chat window, and he said, "Alain, you will need to keep the flow." That's what he wrote.

ALAIN AINA: Okay. So, we go [inaudible] on the document we have in there. Topics is ICANN DNS security coordination process. I don't think that the wedding day is appropriate. ICANN DNS security coordination process. So, I don't know what you guys think, but topic is the ICANN DNS security coordination process. I will stop at the coordination, but not the process is my sense, so I don't know why we have the process. Are we only going to look at it process-wise, or are we going to look at ICANN DNS security coordination?

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED MALE: [inaudible] only L-root operations, so everything else is –

UNIDENTIFIED MALE: Yes, ICANN is doing only L-root operations, and everything else is coordination. So –

UNIDENTIFIED MALE: ICANN does the L-root, does the root KSK [inaudible] involve the DNSSEC, and then the coordination. So, that’s why I say that we need to agree on what we are looking –

UNIDENTIFIED MALE: To be honest, I’d rather just look at the work items because we’ve got 45 minutes now rather than worry about what we’re talking about, what we’re going to call ourselves.

UNIDENTIFIED FEMALE: Hang on, guys, I’m going to try to get him on Skype.

UNIDENTIFIED MALE: [inaudible]

UNIDENTIFIED FEMALE: Hi, Geoff, can you hear me?

GEOFF HUSTON: Sure can. Do you hear me?

UNIDENTIFIED FEMALE: Yes sir, we can.

UNIDENTIFIED MALE: My goodness.

UNIDENTIFIED MALE: Let's turn off the mics.

ALAIN AINA: Do you still want me to continue? I'll leave it to you to manage the session.

DENISE MICHEL: So, we'll quickly run through the progress that each group has made, and do you want to run through the IANA group initially,

just high level what you've done, and then we'll go to DNS security and then ICANN security? Zarko?

ŽARKO KECIĆ: Yes. Can I propose first to start with DNS security? Because Geoff is online and –

DENISE MICHEL: Oh, yes. Actually, that's a good idea. And then of course, we'll put all of this work product which is evolving on our e-mail list, make sure that we give people who are not here opportunities to weigh in. So, that's a great suggestion. Who's going to give us the account of the DNS security?

UNIDENTIFIED MALE: Geoff.

DENISE MICHEL: Geoff is? Alright, then we definitely need [to] address it. Geoff, take it away.

UNIDENTIFIED FEMALE: Geoff, are you able to hear us? Wait, let me try to get him back in here. We're having some connectivity issues. My apologies, ladies

and gentlemen. That's why the screen suddenly disappeared up there too.

Do we have you back?

GEOFF HUSTON: Hi. Yes, you've got me back.

UNIDENTIFIED FEMALE: Perfect. We have Geoff. Go ahead, Geoff, the floor is yours.

GEOFF HUSTON: Okay, thanks. We're going to –

UNIDENTIFIED FEMALE: The call dropped again. We had him on for an hour without a glitch. We get in front of all of you and now this is happening. This is like taking a car to the mechanic.

UNIDENTIFIED FEMALE: I have him on my iPhone.

UNIDENTIFIED FEMALE: Geoff, do we have you back?

GEOFF HUSTON: Hi. Yes, you've got me back. How's that?

UNIDENTIFIED FEMALE: Yes, perfect.

UNIDENTIFIED FEMALE: If you said anything, we missed it.

GEOFF HUSTON: Okay. So, the topic is not just security of the DNS, but it's security and stability. Now, the issue is that the broader consideration of this topic, the architecture of the DNS ecosystem is far, far larger than ICANN's remit. And while there is an intersection, we're going to concentrate on the areas of that intersection rather than the generic topic of the security and the stability of the entire DNS ecosystem.

So, we're going to look at those activities that are directed by or coordinated by ICANN or the PTI, or where ICANN has a substantive presence by virtue of hosting a community-driven process or other forms of community engagement. So, looking at it practically from the ICANN perspective.

Now, the ideas that were thrown up on the board, there are around 11 of them, and we have tried to put them into some kind of structure, because those 11 sort of broad ideas really were a

grab bag of ideas, and it makes some sense to try and categorize them, put them into a taxonomy that gives it structure.

So, looking at this, we can see four major areas of structure. The first of this is the root zone management practice, because ICANN coordinates the contents of the root zone of the public DNS. That's one of its jobs. So, in that root zone practice, we can think about TLD label management. What labels go in the root zone? Are there constraints on those labels? Where do those labels come from? Things like the two-letter country code rules and so on, the issue that no single characters go into the root zone and so on.

Secondly, nameserver and DS-record management. Because what's in the root zone is actually a set of delegation records and DNS key records. How do those records get changed? How are they managed? What's the security behind those changes? Are those measures appropriate is a reasonable thing to review.

I'm pretty sure they are, but we should look at it, we should gather those inputs and make some judgments. What are the respective roles of RSSAC and ICANN? Because in the root zone, RSSAC has a fair deal of say, and it's almost autonomous and independent of ICANN. What are the issues that that's bringing up, and how are they being managed? And does this have some implications for the security and stability of the DNS? Probably worth looking at and making some comment.

And lastly, when you actually look at the mechanics of root zone construction, ICANN, the PTI and VeriSign all have roles in this process. It's worthwhile reviewing that to understand if that is an appropriate process or not. I suspect it might be, but it's worth looking at. So, that's the first topic, root zone management.

The second one is change management, because stability doesn't mean no change. Stability means managed change. So, in looking at change management, looking at the process of introduction of new TLDs in the root zone, looking at the ways in which ICANN coordinates with ISO 3166 in both the introduction and retirement of country code TLDs, I think it's useful and timely to look at the coordination with the IETF, particularly over the RFC 6761 special use names registry, where the IETF is claiming a role that appears to in some ways directly clash with ICANN's role and has some implications for stability. Coordination within the IETF and UNICODE, particularly over IDNA standards and practice.

We also should look at the evolution of the root service and the stability of the identifiers so defined, because certainly, changes are happening in that space, largely driven by the standards bodies, which is the third point: how do you balance community policies, applicable standards, and security and stability concerns when you talk about evolving the DNS?

We heard this morning someone saying in response to a question, “Well, it’s a community-driven process and we’re just doing the job.” What if the stability folk coming out of standards bodies or some other voice is saying no? How do you balance all of those inputs? Where are the checks and balances in this system to ensure the result is a result that works for everybody and not just listening to one view to the detriment of all others?

So, this has a number of implications, all the way through to the contracts and contractual compliance that ICANN has with its registrars. How do you balance, if you will, what folk wanted, community policies, versus what the standards bodies say is appropriate, is a reasonable question.

And last and not least, looking at abuse and threats, which is this whole issue of, what are ICANN’s responsibilities? We know the DNS is used as an attack vector. It’s used as a command and control network. It’s abused in all kinds of ways. That’s fine. But what are ICANN’s responsibilities, and to what extent are they fulfilling the today? Could that be improved? Is that fine? Are they doing even too much? Which I doubt, but you know, is it doing as much as it should and could do in that area is the question to be asked.

So, those are the four major areas. I’m going to write that up, send it to the subtopic three mailing list. We’ll see if we can’t get this

fleshed out as a reasonable work plan by the 7th of July is our objective, which at this point seems achievable.

Questions?

DENISE MICHEL: Hi, this is Denise. James also has a question.

GEOFF HUSTON: Now I can't hear a thing.

UNIDENTIFIED FEMALE: You can't hear anything at all, Geoff? Can you hear me?

GEOFF HUSTON: Now... Okay, so now if I mute this... Now I can hear.

UNIDENTIFIED FEMALE: Geoff, can you hear me?

GEOFF HUSTON: Yes.

UNIDENTIFIED FEMALE: Okay, let's try that again.

DENISE MICHEL: Okay. This is Denise. Can you hear me, Geoff?

GEOFF HUSTON: Yes.

DENISE MICHEL: Great. So, on the roles of RSSAC, I think an issue that might be raised there is to make sure that we aren't duplicating the RSSAC review that occurs every three years or something. That's just kind of an FYI there. And then separately, I wanted to note that we've got some sort of duplication between ICANN security and DNS security to work out in the abuse and threats areas. So, just to flag that in when we get to the ICANN security areas.

GEOFF HUSTON: We're certainly aware of that, and it's certainly our view that matters around for example the L-root management are actually ICANN issues rather than generic DNS.

DENISE MICHEL: Right. Yes. I think the ICANN Security Group would agree with that. We also have things like the ICANN's contractual obligations, the Registrar Accreditation Agreement, the registry contracts. Those things we viewed as ICANN responsibilities and put them

and how that relates to abuse and threats in the ICANN Security Group topic.

GEOFF HUSTON:

That might be a little bit more of a sort of negotiation. And the reason why I say that is that there is no doubt the DNS is changing, and there is no doubt that the standards bodies – particularly the IETF – are actually evolving in what’s allowed and what’s not allowed in the DNS.

The timeliness and the way in which that gets translated into ICANN’s actions, contractual compliance, etc., is I think a reasonable consideration. And whether we put it in the DNS bucket or the ICANN bucket, I don’t know, but it’s certainly a timely topic.

DENISE MICHEL:

Yes, no. I would agree, and I think there’s a sensible way of delineating what parts the two groups are addressing. For example, the ICANN Security Group was not proposing to address getting into at all IETF, the evolving role of ICANN, but rather, focusing more on ICANN’s responsibilities today and its contractual obligations and the compliance department and how it works, more of the practical operational current ICANN activities. So, yes, further discussion there though. James.

JAMES GANNON: Thanks, Denise. So, I feel like I'm going to try to channel Eric here, given that he's not here yet. But in a similar vein, for the item on what goes into the root with regards to the labels and also on the special use names with IETF, I'm going to channel Eric and say, yes, we probably need to have a discussion around it. But I will put a marker in that we need to be very careful on how we frame our recommendations, because at the end of the day, speaking about gTLDs, that is most likely the subject of GNSO policy development.

So, we can certainly as a recommendation say that the GNSO should look at something. But if we're looking at stripping down to why can't we do one-character releases in the g-space, that's a policy development rather than something for us to make specific recommendations on.

DENISE MICHEL: Other questions or issues?

GEOFF HUSTON: You know, James, certainly, there are times where I think the review can say you're doing the right thing. It doesn't always need to point at failings. And I think there are certainly areas where the right thing is happening, and that's great.

The special use names registry and the IETF is not one of those cases, and I think it would be helpful if we at least even highlighted it. Even if we couldn't come up with specific recommendations, it's a thorny problem.

JAMES GANNON: Yes. We agree on that, Geoff.

DENISE MICHEL: Okay, great. Any other comments or issues on the DNS security topic? Okay, thank you so much, Geoff, and thank you for bearing with us through the audio challenges and for staying up so late to be with us. This has been extremely helpful. Alain has a –

GEOFF HUSTON: No, thank you.

DENISE MICHEL: I think Alain has as parting comment. Go ahead.

ALAIN AINA: Yes. So, I was not in a room, but – okay, in case Geoff mention or any of my colleagues mention, we agree on the way forward, we say that we are going to take this and as team members work on

it, maybe add more stuff and have a final document which we'll share with the group. Okay.

DENISE MICHEL: Thank you very much. Alright. And then if you would, either as you evolve the draft or as you complete your work, if you could drop it into the Google Doc that everyone has access to, and so strike and replace what's there now for subtopic three DNS security, that'll I think be really useful in helping the rest of the team understand how you're evolving this space. That's great. Steve. I'm sorry, I missed Steve [inaudible]. Go ahead.

STEVE CONTE: No, that's okay. Just in light of Alain's comment about possibly adding more stuff and in view of the amount of items that were already there – and I know we just went through the wrongfully named deduplication effort, so there are probably less items, is it worth looking for the subteams looking at a prioritization of these items to make sure that the right [fruit] get hit and that if there are more items added, then some conscious choices are made on which items to look at? Thank you.

DENISE MICHEL: Thank you. That's a good observation, and we have a substantial part of our day tomorrow set aside for continuing work on this,

and prioritization and adding details are going to be a big part of that, absolutely. Okay. Are we ready to move on to the ICANN security topic? Yes? Okay.

I'm not sure how I got roped into being the one who's talking about this. I guess something I'm going to have to work on. But let me see. Okay. But this is a onetime thing, and I invite my other team members to please jump in and help explain some of these things or add additional color, or remind me if I'm missing something as I try and transcribe my scribbles.

So, we're – at the useful suggestion of Steve – changing the name of this to ICANN Security and Stability. Or we could do ICANN SSR as a subtopic. Some of these work items also apply to and support security, stability and I think resiliency as well. So, that'll be useful.

And again, we focused on items for which ICANN has a leading – either a sole role or a leading role in effecting a key activity for ICANN, as well as internal ICANN operations. So, those were the guiding principles for our edit of this work item. And so if you're going to pull up the work items in subtopic whatever number this is, two? Subtopic two.

So, if you have it on your screens, the first one's Scope of ICANN's SSR Responsibility. We're moving that to subtopic one as that falls into the SSR recommendations. I'll move through these very

quickly, so please shout out if I'm missing a question or an additional comment.

So, number two, Effectiveness of ICANN SSR Framework Plans and Implementation. We're going to flesh this out with some more detail and it will include things like do we need to clarify the definition of security? More to come on that.

Number three, Physical Security Requirements. They talk about DNSSEC key storage facility. We're going to seek some staff help to flush out some more details there. But we're proposing – and this is something I wanted to discuss with the DNS Security Group of keeping the physical security requirements and the ICANN operational aspects of key storage, KSK, and separate that from DNSSEC, put DNSSEC over into DNS Security. What do you think about that?

And our rationale here is keep the kind of ICANN lead responsibility and ICANN infrastructure in the ICANN Security Group. DNSSEC is a more collaborative, broader reaching item, and move that over to you guys. Don and then James.

DON BLUMENTHAL:

I think the distinction makes sense. To be honest, one of the things I was going to question within group three is whether the extent to which DNSSEC is an issue for us to discuss, because at

this point, ICANN can promote it, but it really doesn't have any mandate or control over whether – so, I'm saying yes it does, but it may be premature to say that in terms of what we do.

DENISE MICHEL: Thank you.

JAMES GANNON: Thanks. So, there are two aspects here. So, I agree with both sides, but – so, there is DNSSEC as a global DNS concept, and then there is DNSSEC of the root zone as performed and operated by ICANN. The former would fit into DNS Security, but the latter, the actual operation of the root zone KSK and everything else, that is 80% operated by ICANN with VeriSign doing some stuff. That's an ICANN infrastructure issue and I would think that stays in ICANN Security.

DENISE MICHEL: Steve?

STEVE CONTE: I think there are more sides to it than that too, because as Geoff mentioned in his briefing of the DNS Security things, there's also the management of the DS-records in the root, which is not ICANN Security, but DNS identifier management aspects. So, I think

there is a splitting, and I think trying to find the nuances of the splitting is important between what subgroups look at what items.

DENISE MICHEL:

Thank you. I'll flag that for something we could continue to discuss tomorrow. And then in the interest of moving through this list, we added sort of a restated category that captures a number of items so we crossed out as duplicative with the intention of adding a section on reducing the probability of DNS-related incidences, and that would encapsulate activities that ICANN undertakes that help reduce the probability of not only DDoS, but other DNS-related risks.

And that also would allow us to look at the various components within ICANN and their roles in helping to reduce the probability of attacks and other threat vectors. So, that would include things like L-root, domain name contractual obligation, compliance, security training, those types of things.

So, we're separating so the proactive – what we're doing to reduce the probability – and separating that from the reactive incident response. And then there, in that category, we're proposing a gap analysis and sort of lessons learned that focuses on being reactive to incident response. When there was an

incident, what was ICANN's role? How well did it fulfill its role? So, do a gap analysis in that area.

Okay. So, those are two kind of general concepts that we wanted to cover in here, and might make more sense after we write this up.

Don, you're looking at me like you have an interjection. Okay.

Alright, and then we had – there's a section on measurements and metrics, and that encapsulates things like DART, the DNS Abuse Report, the health index, and I think the action or work item there is more along the lines of gap analysis there, undertaking things like the index and the DNS abuse reporting, so we want to look at what the evidence tells us looking at the sort of gap analysis can – you know, what's happening in that area, what ICANN's role is, that type of thing.

Moving on then to ICANN internal security, stability, resiliency of its operations. So, that's a category that includes IT operations and risk management as it directly relates to ICANN's own IT systems. There's the GDD operations separate from IT security, so there you've got the breach of public-facing databases relating to new gTLD services and those types of things.

Separate from that is the CZD, the central zone file system, data system, and then there may be a few other elements in there.

We're going to have to check with staff to get a more complete list. And then another element of that is the outreach, public information role, which includes training, outreach, some of those.

Then our colleagues Noorul and Boban are going to rewrite both the risk management framework related items to make it more clear and more detailed as to what it includes. And then we have a whole section on best practices relating to certification. We'll be combining and restating 11 through 16, kind of combining that into one element with several subtopics. So, we've eliminated 9 and 10 as duplicative.

So, we're eliminating 9 and 10, and we'll be combining 11 through 16 under a more consistent item dealing with best practices and certification. We eliminated 17, 18, 19 and 20 as too broad. We'll flesh out a category related to non-DNS specific incident response plans.

Noorul, can you remind me, is that tied to the risk management framework, or is that separate? That's not planning, that's, "How did ICANN respond to incidences that are non-DNS?"

NOORUL AMEEN:

Yes, what are their management policies and global coordination with the corresponding [inaudible] and those kind of policy

issues. Those kind of issues will come [as] standard incident response.

DENISE MICHEL: Right. Okay. Got that? Number 22, we're proposing the move. It's the coordinated vulnerability disclosure process. James.

JAMES GANNON: Sorry. Two comments. There are two types of incidence responses and there are two types of coordinated vulnerability disclosure policies.

DENISE MICHEL: Do you want to address incident responses first and Noorul can handle that?

JAMES GANNON: Yes. So, there is coordinated incident response for things that are happening on the DNS that ICANN plays a part in. That's one. There is also – or there should also be – a separate one for breaches of ICANN's internal systems. So, these are two different things. One would fit under ICANN Security and one would fit under DNS Security.

NOORUL AMEEN: The first part is – just carry on, Steve.

STEVE CONTE: I'm sorry. Just to clarify that, because the 22 I think directly discusses the process that ICANN calls the coordinated vulnerability disclosure process. So, if there isn't a separate one, we should flag that and call it. the reason why it's all capitalized is because there's a process that's been developed and exercised called that.

DENISE MICHEL: What is it?

STEVE CONTE: John Crain could probably speak to this in more clarity, or David Piscitello, but if there's a vulnerability discovered that could affect the domain name system, such as large operating system platform developer found a vulnerability in their version of DNS, the process was so that we as an organization can work with them and maintain the sensitivity of it without disclosing it until after the vulnerability was patched up and fixed, and then put out there.

So, it was just putting us in a trustful position that we as an organization could participate in the mitigation of vulnerabilities

that affect the DNS. But if there are other aspects to it, then we should flag that and treat that as a separate item than this specific process.

NOORUL AMEEN: Answering to James’s question, there are two aspects. One is a global incident response aspect. That is covered under this point, incident response. The second point, ICANN’s incidence response, that comes under the gap analysis of ICANN’s internal security operations. That is already covered in the point six or seven, no? Gap analysis and Internet security.

DENISE MICHEL: Right, yes. DNS related, we have separate categories for that. Hopefully, it’ll make more sense when it’s written up. We’re ready to move – okay. We weren’t quite sure what “Assess ICANN’s ability to respond to strategic threats to the unique identifiers it coordinates” means, but it’s likely combined with 22 and the way we’re proposing to deal with incident response and risk management.

24, instead of vetting process for EBERO operators, there needs to be a category EBERO, and it has a number of subtopics under it. So, we’re going to take a first cut at that, and I think other team members will have some additional items to add.

25, ICANN process around vetting registry operators. Again, we're proposing a registry category. Vetting operators is one. I think we have other registry-related issues that have been raised that we're proposing to put under that category.

We deleted 26 as duplicative then.

27, what is the scope of ICANN's threat modeling? I think that we're going to combine with the previous categories that we articulated around reducing probabilities of risk and risk management framework activities.

We're proposing to delete 28 through 34 as being covered elsewhere.

35 we're deleting from this as it's covered in risk management, as is 36. 35 and 36 are covered under the risk management item. So, we're going to flesh that out but remove it as a separate item.

And then we don't know what 37 means, "What is ICANN doing in the area of interoperability, security, STDs to monitor (ITHI)." We deleted it, but if someone has an explanation and argument as to why it should be put back in, please let us know.

I mentioned that we have an item on registry issues, we have an item on registrar issues, we have an item on compliance, ICANN compliance and issues under that. We have an item under L-root, and so we want to flag that for the DNS team. So, under our

framework of ICANN’s primary role, we thought it appropriate to include L-root, the operations and best practices that they engage in as an item to flag under ICANN SSR.

And then I think the other one we added was IDNs as a separate category. We have a number of issues that have come up under that, so we’d have IDNs and then specific issues under that.

Noorul, Boban, Ram, have I missed anything? Do you want to elaborate on anything? DNS Security team, do you hear any other duplications or issues to discuss here?

[ŽARKO KECIĆ]:

Yes, I just want to mention that there are a couple of things which are mixing actually duplicated with SSR1 review. Actually, when we do work on this, we should collaborate with SSR1 team on those issues.

DENISE MICHEL:

Yes. Thank you, [Zarko.] That’s an excellent point. So, this evening I’ll flesh out the list of work items for SSR1 and include all the recommendations, and then I’ll flag the ones where I’m aware of the connections to other subgroup topics, and we can discuss this further tomorrow. Noorul?

NOORUL AMEEN: For our internal security operation, ICANN’s internal security operation, we need to coordinate with the [CTO] also.

DENISE MICHEL: Right, the CIO. Right, yes. So, we have a number of issues and questions for the CIO, and he’s on our list of people to talk to. Yes, thank you. Any other issues? [inaudible]

UNIDENTIFIED MALE: Yes. When we mention CIO, we should think about making that list of questions.

DENISE MICHEL: Yes. I think there are so many issues that have already been raised, it would be a great idea – thank you – to develop a list of questions in advance before he talks to us. Yes, thank you.

UNIDENTIFIED MALE: Excuse me. We agree on that, but we should start working tomorrow on that.

DENISE MICHEL: Like actually start listing? And so if staff could take as an action item, “List of questions for CIO,” and we’ll want to put that on our action item list for tomorrow.

JENNIFER BRYCE: James actually got started on this this morning. He sent me a list over, so I'll put it in the Google Doc and share it this afternoon.

DENISE MICHEL: Wonderful. Thank you. Thanks, James. Any other items on this?

So, I'll flesh out the work item list for SSR1, flag items that are connected to other subtopics. The four of us in ICANN SSR Subteam will clean up the work item list for this topic, and we'll be ready for further discussions tomorrow.

It is 4:00. We have an hour remaining. Are there any other issues? I think we've done a good job of teeing up a lot of work for tomorrow, and most of tomorrow will be focused on subtopic work. But before we close out the discussion this afternoon, is there anything else you'd like to raise relating to subtopics?

Pardon? Would you like to do IANA? That would be great. And then just FYI, we've got a discussion on outreach and then a review of our action items before we're done. Go ahead, James and Cathy.

JAMES GANNON: Thanks.

CATHY HANDLEY: He's going to channel me.

JAMES GANNON: I'm going to channel Cathy [inaudible]. So yes, we had a really good meeting. We fleshed out most of the breakdown of the high-level topics into what areas we want to look at. They're primarily concerned with the resiliency piece of [PTLE] post-transition. So, it's business continuity planning, it's impact on processes, impacting on training, documented evidence of business continuity plan testing, this type of thing.

We've identified that we would like to meet with Kim and with Elise both from PTI. Jennifer is taking an action item to reach out to both of them with a hope that we might be able to grab them here in Johannesburg, because they're both here. So, it would be useful if we could do that face to face. If not, we're going to schedule a call for some time in the coming weeks.

We've identified what we think is a list of documentation that we want from ICANN and PTI on these topics, so again, Jennifer is going to reach out to staff to try and coordinate what we think exists documentation-wise and turn that into what is actually there, and then hopefully look at what that can be released publicly versus under NDA, etc., because some of it would be sensitive documentation.

So, we can look at that, and the hope is that we can conclude the interviews and the documentation gathering by the end of July is the plan. We're both pretty busy for August, so the plan is we'll start writing up the outcomes of that over August and it happens that myself and Cathy are going to be in Geneva at the same time, so we'll try and get together and finish that out then at the start of September with the hope to deliver that mid-September.

DENISE MICHEL:

Great. So, again, we'll update the Google Doc for the subtopics that we've worked through today so we'll be ready to address those items in tomorrow's agenda.

Thank you. Anything else on subtopics before we move on?

Outreach. Could staff pull up the basic text that had been previously agreed to by the team relating to outreach?

There had been a request to address outreach at this meeting, determining what guidelines are needed, addressing ICANN's internal outreach to SOs, Supporting Organizations and Advisory Committees, as well as external outreach and outreach by the team broadly and team members specifically. So I'll wait until the staff has a chance to pull that up.

So we have a general commitment to outreach as we noted in our terms of reference. And then, of course, going beyond the basic

tools that we already use, of having a wiki, providing regular updates on our progress, and having recordings and notes and agenda items, and all the other information, being transparent on the wiki and encouraging e-mail input as well as noting observer contributions in our calls and meetings.

The issue that some members asked that we address, I think under the broad rubric of outreach, is do we need more specific guidelines on how we're going to conduct outreach, both within the ICANN community, and more broadly? And if team members find themselves at conferences of organizations and entities that are relevant to the SSR arena, should they talk about the SSR team's work? Should they do that in their personal capacity as a team member and distinguish that from speaking for the team as a whole? I think these are the types of issues that, questions that have arisen over the last couple of months, I think, by some team members. So this is an opportunity to discuss this further.

Way back in March, I think I was asked for kind of an initial list of some of the types of entities that we would want to consider if it's relevant to do some outreach to. That could take the form of simply an e-mail saying, "Here's our terms of reference and work plan. We invite any input you may have to sending a specific set of questions to an entity or having a conference call with them." So outreach can take a lot of different forms.

But this simply lists the various bodies within ICANN and if you scroll down, includes, and then of course, the SSR1 Review Team that we've contacted and requested for any input they have on implementation of SSR1. And these are just an assorted list of other sort of Internet ecosystem players. This, again, is simply a kind of draft list of entities out there. It's not a "here's everyone we're going to talk to" list.

So that's what I have on outreach. I'm putting it here on the agenda to give people a forum to discuss it. Who would like to start? Or are there people who care not here today? We can hold this over until tomorrow.

James. Alain, and then James.

ALAIN AINA:

Yes. I think I am one of the people who always raise these issues, so thank you for giving me the opportunity.

One of the things I think I always saw we should clarify is what do we mean here by outreach. Because I see, if you look at the things, for example, where if you look at ICANN community and then the community At-Large, a consistency there, which are customers or directly elected to what we are doing here in terms of security and stability.

For example, IETF, the RIR, for example. So for me, I think – SSAC, RSSAC – so these people, I think we need them for this review, to engage them and discuss with them, etc. So for me, I don't see them, I don't see talking to these people as outreach. For me, it's part of collecting data, reaching out to people who are affected by this security and stability, resiliency, who are the primary customers or community member involved.

Then maybe when we have some product or we have something, then we go for the global, what we call the outreach where we meet people, we present a primary report, we get feedback, etc. So this is how I see things. I don't know if everybody shares my view on this.

JAMES GANNON:

Thanks. Yeah, broadly in alignment. I think there's two types of outreach and there's one time point that changes our outreach. There is publicizing our work, and there is asking for specific input. And publicizing our work is basically, to me, saying, "Hey look, we're doing this thing. Do you have any general comments on what we are doing?"

There is specific input which is approaching SSAC on this specific topic because we want feedback on that, or approaching the TLG, the Technical Liaison Group, to the Board. These specific, "We are approaching you for a specific reason."

The former – the “Here’s what we’re doing. Aren’t we great? Can you give us some general feedback?” – I think we can approach pretty much everybody with that. I think that’s something that we can do, shout for out loud and send things to our wiki and to our observer list.

The specific question approach, I think needs to be a little bit more considerate and I think if we are looking at asking specific group specific questions, that’s something that we should discuss as a Review Team and how we frame those questions and what those questions are at a basic level.

And then there is also a time point which changes things, which is when we have our draft report. So everything up to our draft report is input and then once we’ve put out our draft report there as a work product, we need to change our tack a little bit because anything that we get back at that point is potentially commentary that we might need to assess and incorporate which changes the dynamic a little bit, which is where I think we need to be more. It would be somebody from the Review Team is presenting our report at a conference with the specific goal of getting input from that group of people or we are approaching and presenting to this group as, “We want your specific input on what we have written.” So there is kind of the time point and then the two different types that I think we need to be careful on.

DENISE MICHEL: Thank you, James. Cathy?

CATHY HANDLEY: Thank you. I'll take what James said a little bit farther, and what Alain said, I think it's fine to ask questions of other groups regarding what's in a document, but I think we have to be very careful how we do that because there are some, I'm sure, groups that will want to respond and rewrite things. Their job is not to write the report. That is our job and we just need to make sure that we have a real clear understanding if we get ready to go out and do some outreach, and to go to IETF and say, "What do you think?"

IETF is 800 people and you're not going to ask 800 people, so we need to really keep that in a little box. Thank you.

DENISE MICHEL: Thank you, Cathy. Those are all very useful comments. I would also add – well, it's actually a question – should we ask the subtopic groups in their work items when they're flagging, sort of tasks, next steps, to also flag those issues for which specific input is needed or information gathering involves another entity within ICANN? Cathy?

CATHY HANDLEY: I think that's an excellent idea. I think the subgroups are going to know what's going on and are going to know where they are in questions, and the reasoning that the question is being asked, which is half the issue.

So the first place I would look would be to the subgroups. If someone thinks they have an opportunity to go speak to someone, I would say they should go back and talk to that subgroup or reach out to that subgroup and make sure that the subgroup agrees there's questions, not just the individual that's doing the outreach that may have a question. Does that make sense? Okay.

DENISE MICHEL: Yeah, that makes sense. Other comments?

So do people feel comfortable with this conversation and kind of the direction that we've outlined? Is there a feeling that we need more official documented guidelines? How are people feeling about outreach at this point? James.

JAMES GANNON: So one concern that I've had, and this may be just me, I don't want any group to feel special. So particularly if we're potentially doing

a V2 of our terms of reference, I would almost like to swap our list with some guidelines instead and then that gives us the flexibility to, within the subgroup, say, “Okay, well, here’s how we are going to approach outreach” rather than say, “Well, here’s who our people are,” and then if we go outside of that, then it’s like we’re outside of our terms of reference and it gets a bit more messy because we’ve identified internal and external groups here that we’ve kind of went, “These are our outreach people,” you know?

DENISE MICHEL:

Yeah. Thank you, James. And if I may just respond before Don raises his point, that we don’t have a list. This list was kind of just an initial brainstorming list for particularly people who are newer to the ICANN arena and wanted to know who were some of the players or groups that touched SSR. We chose not to put a specific list of entities for outreach in our terms of reference, just noted as appropriate and necessary for the conduct of the SSR we would conduct outreach with, you know, relevant groups.

But your point is well taken that we should be specific and targeted with our information requests and contacts with other groups, coordinated well with the subtopics and be mindful of treating all of the external groups equally in a neutral fashion and making sure we keep things in the context of input, but the

Review Team ultimately has to make their own decisions about the recommendations. Don?

DON BLUMENTHAL: Normally, I wouldn't put a stress on announcing exactly who we want to talk to. I think, I don't agree with all of the Board's comments, but if in the interest of politics, if we question whether we should or should not disclose information, I would do it. Just [said] politically.

DENISE MICHEL: In terms of who we're asking questions of, who we've sent e-mails to encouraging comments, or sort of documenting all the different ways we've shared information and encouraged input – is that what you're saying?

DON BLUMENTHAL: At the very least, I would suggest that we announce the types of groups we're talking about and while I'm not necessarily comfortable about being specific if only because if somebody said something about hurt feelings or something like that.

DENISE MICHEL: Thank you. Other comments or contributions on this point?

Okay. Great. Thank you for that.

This takes us to reviewing our action items. Staff, could you please pull up the staff and team action items that we need to review? And while they're doing that, if there's anything that... We noted that we're going to add the Board letter to our agenda for tomorrow. If there's any other issues people have about tomorrow's agenda, please take a look at it and we'll address that right after we talk about action items. If we wanted to look on our own screens, where is this located? Can you use your microphone?

JENNIFER BRYCE: So this is on the wiki, the SSR2 wiki. There's a tab, "Plenary Action Items".

DENISE MICHEL: I'm sorry. What's the tab called?

JENNIFER BRYCE: It's called "Plenary Action Items".

DENISE MICHEL: Okay. I'll just start down this list, and as they noted, it's under the wiki Plenary Action Items tab. So we still need rapporteurs for the rest of the groups, so that's something we're going to get done by tomorrow, close of business.

We'll, we need to address updating our call schedule, so that's an item that's still outstanding.

In our last conference call, we reviewed the list of participants in the three call times that we have scheduled and there's a proposal on the table to drop one of the rotations and just have two separate time schedules for calls, so we want to see if we can get closure on that, if not tomorrow, then in the next week, we can follow that up on the list.

We have the January Doodle poll. As a reminder, that closes tomorrow at the end of the meeting, so if you have not gone on Doodle and added your availability for the various options for a January face-to-face meeting, you'll need to make sure you do that by the time our meeting's done tomorrow so everyone can plan well ahead on their schedules.

We posted the latest progress update, right? It's on our wiki or it will be.

Microphone.

JENNIFER BRYCE:

Sorry. On the action items list, it's actually embedded there where it says "June Progress Update".

DENISE MICHEL: So staff has sent it out to the various ICANN groups as an informational item and it'll be posted on our wiki. So we have staff. Staff has captured discussion around outreach and we've just had that discussion. Okay.

ICANN DNS Engineering Team to reframe the following question. So that's an open action item. Emily has contacted staff. I think staff is working on a response, right? Steve.

STEVE CONTE: So yeah, my understanding from DNS Engineering is they are working on a response and Emily had flagged discussion for the larger topic of the clarity or reframing of questions, how the Review team and how staff should interact with that. So as two separate items, I'm awaiting an answer from DNS Engineering and I think, I got the impression that Emily wanted to have a discussion about the process itself.

DENISE MICHEL: Yes. There's two issues here. One is the response and information gathering on that server-related question that Geoff asked, and then aside from the substance relating to the root servers, there's more of a process question of staff seeming to unilaterally decide that something is out of scope that's requested by the Review team.

So after we get a response to Emily’s e-mail inquiry from staff, then we can put that on our team list to discuss. James.

JAMES GANNON:

Thanks. Just it might be an idea that, not necessarily just for you, Steve, but for other members of staff when they’re reaching out, if there are, for example, concerns about confidentiality or whether information should be public or not, that is an ongoing process at the moment about what processes should exist to release documentation to the review teams. That’s something that, for example, ICANN Legal are working on at the moment, so I have to say I do agree with Emily on this, that there really shouldn’t be any cases that we receive a “no”.

I do agree that there will be cases where it’ll be, it needs to be in this form or it needs to be under this NDA or it needs to be after this conversation, [inaudible] at the end of the day, there should be very few situations, maybe one or two where there is an absolute no.

DENISE MICHEL:

Thanks, James. So we’ll pick that item up again after we get a response from staff.

Requests for follow-up questions to the Global Stakeholder Engagement staff that were on our call. They did provide their

follow-up reply. I believe they responded to all of the questions. Is that correct? Okay.

Okay, share thoughts and continue discussion on list regarding presentation of ICANN Security and SSR1 subtopic work plans. We're doing that. Share thoughts on the list on how to be more important to observer inputs. Is there any additional input on observers or the way we're processing observer inputs? That's always an open, ongoing invitation.

Next one is Review Team members continue to volunteer for subtopics. More volunteers, particularly, are needed for group one. So again, really by tomorrow, we want to have solidified the membership of the subtopic groups and get the rapporteurs identified.

Draft work plan proposal for the SSR1 Review and ICANN Security topics. That's building on the work, initial work, of Boban and Žarko. Go ahead, Jennifer.

JENNIFER BRYCE:

Hi, so some of these are actually marked as complete and I don't know if you can see, if you can scroll over to the side, and that way, yeah. So can you make it –

DENISE MICHEL:

If you do full screen, you can see that, which I hadn't done initially but now I can see the status. I can see the ones that are done. Okay.

Consolidating duplicative items, working on the subtopics which we're doing now and finishing tomorrow, drafting our work plan which is our key deliverable for our meetings here in Johannesburg.

Share thoughts regarding outreach engagement. We've just done that and we'll reflect those on the Google Doc and continue our conversation there.

The next few items are shown as completed. Then we have draft note and summary of SSR1 implementation for ICANN to send to the SSR team members. Invite them to share their assessment. Okay.

So as part of the SSR1 subtopic team, we'll be starting our work on assessing the implementation and its effectiveness, and as part of that, we'll be following up as needed with staff. We've already covered SSR1 outstanding briefings very thoroughly, I think, and that need to wrap those up. The rest are completed.

We've got reviewing the nondisclosure form with ICANN Legal and reporting back to the Review Team on any updates or edits to the circulated form. James.

JAMES GANNON:

Thanks. So just for an update for everybody, so myself and Kerry-Ann met with a number of members of the ICANN Legal team, Sam Eisner, Dan Halloran, [Lena] I think as well was there. We had a very, very good conversation over, well, my concerns over the NDA and Confidential Disclosure Framework and we came to a pretty good medium ground on how we can approach this.

Sam has gone back, obviously, with her supporting CCWG this week. It's going to take her a day or two after Johannesburg to flesh it out, but there's going to be some changes to the Confidential Disclosure Framework and there is also going to be a process and kind of a review piece for us as we start putting requests in if we encounter issues for, and it will be in the formal approved Confidential Disclosure Framework that we can ask for it to be reviewed and updated based on our experiences as we go through the Review Team so that it becomes not quite a living document, but if we encounter issues, it can be updated to meet our needs.

DENISE MICHEL:

Thanks, and so it's going to take Sam this week. So should we put this as an item on our next conference call after Johannesburg to close it out? Okay. So if you could put the, instead of a TBD, put

the deliverable for whatever the next conference call date is for that one.

Collaborative tools is next and you're going to be talking about that tomorrow. Great. So we'll have, I think, perhaps some more specific deliverable on the staff side after that presentation tomorrow.

The next open item is Statement of Work for a Technical Writer. Louisa has a delivery date for providing us some draft text, correct? If you could get that delivery date from her and put that in there instead of TBD. Wherever we have "to be determined", we'd like to have specific dates.

So for everyone's edification, there's been quite a delay but staff is finally committed to getting us some draft language to review for the Technical Writer Statement of Work. James and Cathy and I had volunteered to work together to provide a draft Statement of Work to the full team for their review and then getting it out, we had hoped to have it done quite before now, but I think that is finally on track and hoping that we can wrap that up soon.

Provide the SSR2 a timeline for the ITHI. That's the Technology Health Index project. Steve.

STEVE CONTE: Thank you. I think I brought this up on the last call when we were reviewing action items, and if I did, I apologize. I received some input from Alain Duran from the OCTO team, and a couple of e-mails responding to this, so it's my action item to consolidate those e-mails and prepare a response for the Review Team. So I can have that by the end of this week, so by the next call we do, it will be already submitted to the Review Team.

DENISE MICHEL: So this is the specific timeline and schedule for ITIH?

STEVE CONTE: This is a response to the timeline. I have to look at the e-mails again. I don't think they have a specific timeline yet, but it's responding to the formation of it. Let me get that together before I give you any kind of better response.

DENISE MICHEL: Thank you, and so we can put the next conference call as the date instead of TBD on that.

The rest of the items on the list are marked as complete. Is there any additional items people would like to put on the action items list? We've got follow-up questions for staff relating to the SSR1

presentations we have today, so that's on the list specifically. Anything else from today's meeting? Nope. Alain?

ALAIN AINA: I think we still have open, if I'm not mistaken, we [have] discussion on the nondisclosure [agreement].

DENISE MICHEL: Right. The NDA or the Nondisclosure Agreement, James and Karen, Emily, someone else has been working with ICANN staff to get clarity on that, and so it will be on Kerry-Ann was helping with that. So it'll be on the next conference, the first conference call we have after Johannesburg, that will be on the schedule. So we'll have the updated NDA, we'll have guidance around whether and when it needs to be signed, what the implications are, and in general, how the Review Team is going to handle nonpublic or sensitive information. Yeah. Any other questions or issues? Action items, that is. Don?

DON BLUMENTHAL: Just jumping back to the Doodle poll, the e-mail said it's due the 26th and to be honest, I'm not going to know if I can go out and play that weekend until I talk to my wife.

DENISE MICHEL:

Well, that’s an important exception. So we’ll leave it open a little while longer and wait to hear from you, Don. Anything else? Okay.

Then the remaining item we have on our agenda – it would be so awesome if we could end a little bit early – is just to review our agenda for tomorrow. Again, we’ve got continuing our subtopic work groups, adding specific tasks, more information, developing work plans and timelines in much more specific detail, flagging any information gathering, community discussions, research that needs to be done, any information we need from staff to move that forward, so all of that will be done tomorrow and then we’re going to pull that into the sort of scope of work, and work plan, and a more robust timeline for the team as a whole.

And so, it’s basically one big work session tomorrow with the exception of, and I’ll note this in the agenda that we update and send around, we’ll be discussing the Board’s letter tomorrow as well. That’s the only addition to tomorrow’s agenda. Any other suggestions or things they want added to tomorrow’s agenda? Nope. Okay.

That brings us to the end of our agenda for today. Are there any other items people would like to raise? Don?

DON BLUMENTHAL: Pure logistics. Wondering if anybody else is staying at the Garden Court so we can coordinate getting over to the dinner tonight? Or maybe I should ask how are we supposed to get to the dinner tonight?

DENISE MICHEL: Great. I was just about to turn it over to staff to remind everyone when and where dinner is and other logistics. Yvette?

YVETTE GUIGNEAUX: Hi, everyone. Okay, for tonight, dinner is at 7:30 P.M. It's at the Michelangelo Towers, which is directly across the street here. I will go ahead and butcher the name of that restaurant. I think it's Paviglione. This is where Pamela is much better at this than I am.

Basically, it's on the, you can get to it from here. You don't even have to go outside. I know Garden Court, you may end up having to go outside, but if you're still in the building at that point, if you go to the third floor on the same end of the building that we are here, there's a sky bridge that goes directly across the street. You go across the street on that sky bridge. The restaurant's right there on your left-hand side, first thing when you walk in the door on the towers. You can't miss it.

So that should be about it. That's the easiest way to get there. I know some of you may not be staying here, but the easiest way to

get there is to take that third floor sky bridge across the street, which is Mod Street right out here.

DENISE MICHEL: Steve.

STEVE CONTE: And we are meeting over there, not at the restaurant, but at the Michelangelo Towers, tomorrow. Is that, so the directions are the same – you go across the sky bridge – because I’m going to get lost. I’m good at that.

DENISE MICHEL: Yeah, and thank you so much for raising that. Yes, can you give us explicit instructions on how to get, and remind us where the meeting is tomorrow? Thanks.

UNIDENTIFIED FEMALE: The meeting tomorrow is just past the restaurant, so if you make it to the restaurant, you’re almost to the meeting room. And they will have signs in the hotel directing you to the meeting room. So it’s down the hall from the restaurant.

DENISE MICHEL: Could you specifically tell us, in case someone misses the dinner, how to get to the meeting tomorrow? And it starts at 9, by the way.

UNIDENTIFIED FEMALE: It starts at 9. Same instructions.

DENISE MICHEL: Where is it located first?

UNIDENTIFIED FEMALE: In the Michelangelo Hotel. If you're connected to the walkways to the convention center, on the third floor, there is a sky bridge that goes directly to the Michelangelo Hotel. You'll end up in the lobby and there will be signs there that will, in essence, you walk past the restaurant, down the hallway, and that's where the meeting room is.

Now we have checked and there are spaces, public spaces, to break out into, little sofa areas that if you wanted to break out in working sessions, groups could meet that way.

DENISE MICHEL: Room number or name?

UNIDENTIFIED FEMALE: I don't have that.

YVETTE GUIGNEAUX: Let me spell it for you because if I try to pronounce it, that will just be comical. So let me go ahead and try to spell it for you. The room is spelled IL PAVIGLIONE. My guess would be IL [Pagnoli].

The idea, the way we found it is we went across the same sky bridge and you're going to see the restaurant on your left. You keep going. So in other words, you make your first right and then you make two lefts after that, and keep going straight and you'll eventually run right into the reception area and then you'll see the room.

I will be out there tomorrow. Pamela will be out there tomorrow. There will be people out there to get you where you're going, so you won't be walking in the lobby going, "What in the blue blazes is going on?" We will be there to get you to the room.

But in case you're one who wants to GPS it yourself, you can go across the sky bridge and it's one right and two lefts. This is, honest to God, how the reception area told us to find the room. Swear to God. True story. And we actually did. We did. It looks like a mall area. You swear you're walking into the mall.

So you go down there, you walk, and to the right, and I'm like, "Two lefts?" They weren't kidding. There it was. So you can go

ahead and do that, but we will also be out there to get you where you're going. We won't leave you lost. I promise you.

DENISE MICHEL: Thank you so much. There you have it, folks. Start early to find the room. We're starting at 9 a.m. tomorrow. And if there's no other business, thank you so much for all.

There is other business. Alain.

ALAIN AINA: Just to inform the group that tomorrow, I'm going to be on the DNSSEC panel tomorrow around 9:50, so I may be late, so.

DENISE MICHEL: Thank you, Alain. All right, we're adjourning. Thank you so much for all your hard work today. I think we made a lot of important progress and I look forward to bringing this all home tomorrow. See you all at dinner.

[END OF TRANSCRIPTION]